Arizona Violent Death Reporting System: Internal Evaluation Report, 2018

By the

Center for Violence Prevention & Community Safety

Arizona State University

This report serves to provide an internal assessment of the operation of the Arizona Violent

Death Reporting System (AZ-VDRS) project conducted by the Center for Violence Prevention and

Community Safety (CVPCS), a unit within the Watts College of Public Service and Community Solutions.

The AZ-VDRS was implemented in 2015 and has completed two years of data collection. The AZ-VDRS is

one of 52 National Violent Death Reporting System (NVDRS) sites[1] (i.e., 50 states, Puerto Rico, and the

District of Columbia) that are part of the nation-wide effort of the Centers for Disease Control and

Prevention (CDC) to monitor, assess trends, and generate data on suicide and homicide within the

United States. The fundamental purpose of the NVDRS is to create and maintain a system for

understanding the underlying causes and overlapping circumstances of violent deaths in the United

States. The strategic plan for each site is to establish and implement the system, and then to collect

high-quality data and produce meaningful dissemination products that can support actionable

information in the efforts to impact suicide and homicide occurrences.

The AZ-VDRS established the system, and initiated data collection with 2015 violent deaths. The

purposes of this Internal Evaluation Report is to examine and assess the AZ-VDRS site's performance in

maintaining high-quality data collection efforts and producing usable information. This report is

organized around five central assessment categories: timeliness of data collection, representativeness of

data, data quality, staffing efficiency, and data dissemination.

Data Timeliness

An important performance indicator for the AZ-VDRS is the amount of time that lapses between

the date of death and the initiation of abstraction. Different NVDRS sites use different data sources to

initiate their cases. In Arizona, the AZ-VDRS uses the death certificate to initiate its cases. This case

initiation process measures the length of time between a given decedent's "date of death" and the date

---

[1] This report may refer to the sites as "states", but does not explicitly exclude Puerto Rico, Washington D.C. or other future "non-state" based sites.

that data abstraction began on that decedent. The NVDRS sets the standard of case initiation at 180

days. The NVDRS recognizes that some incidents will not be known to authorities within this timeframe,

and there are natural, expected limitations to the timeliness that data sources can and will provide data

to the program. Therefore, the CDC assesses sites' performance on timeliness by using the percentage

of cases within a state initiated within 180 days. The performance numbers are categorized into "Poor",

"Fair", "Good" and "Excellent" categories. Further, the CDC uses a "state-rank" scoring procedure, which

informs the sites of their performance on the timeliness measure, relative to other states. It should be

noted, that for 2016 data, there were only 32 states active in the NVDRS, not the current 52 sites.

Exhibit 1 shows the CDC's assessment of the AZ-VDRS timeliness defined as the percent of 2016

cases initiated within the NVDRS standard of 180 days. The CDC rates timeliness in three "Manner of

Death" indicators: homicide, suicide, and all manners, which includes homicides (and legal

interventions) suicides, undetermined deaths and unintentional firearms deaths. Percentage values are

rated from "Poor" to "Excellent", based on relative typical performance by manner. The AZ-VDRS was

ranked "Fair" in two timeliness performance categories (suicide and all manners) and ranked "Good" in

the other (homicide). Although the AZ-VDRS was not ranked "Excellent" for any timeliness category, it is

important to note that in 2016 we showed improvement from 2015 in all three categories.

Improvement, as measured by percent change from 2015 ranged from 6.5% to 14.5%.

Exhibit 1: Timeliness of Death Certificate Case Initiation, 2016					
Manner of Death	Number of Deaths	NVDRS State Rank	Percent w/in 180 Days	Performance Category	Change from 2015
Homicide	440	22	82.9	Good	+6.5
Suicide	1,265	25	78.6	Fair	+14.5
All Manners[1]	1,910	26	76.3	Fair	+12.4

1 Includes Unintentional firearm and Undetermined manners of death.

Exhibit 2 provides an AZ-VDRS internal assessment of timeliness during the 2016 collection year.

The table reports the mean number of days for cases to move through the abstraction process, by data

source. The first section shows the mean number of days (and standard deviation) from the estimated

date of death to the date we received the death certificate data, and then the mean number of days

from the date of death to the date the data was abstracted into the NVDRS data management system.

For medical examiner and law enforcement data sources, we report the mean number of days from date

of death to: 1) the date the data was first requested from the relevant agency, 2) the date the data was

received, and 3) the date the data was entered into the system. Additionally, we report the number of

days from when we entered the death certificates data to the date we received and entered the data

from other sources (i.e., medical examiners and law enforcement).

Exhibit 2: Internal AZ-VDRS Timeliness Assessment, 2016		
Death Certificate Data	Mean	SD
Number of Days from Date of Death to…		
Data Received	108.2	140.20
Data Entered	122.0	138.27
Medical Examiner Data	Mean	SD
Number of Days from Date of Death to…		
Data First Requested	143.3	154.00
Data Received	239.8	175.72
Data Entered	360.6	137.17
Number of Days from DC data entered to…		
Data Received	121.8	144.02
Data Entered	242.7	128.61
Law Enforcement Data	Mean	SD
Number of Days from Date of Death to…		
Data First Requested	161.9	173.09
Data Received	312.5	228.30
Data Entered	402.3	185.60
Number of Days from DC data entered to…		
Data Received	211.2	224.46
Data Entered	300.9	186.01

Observations and Recommendations

Overall, data timeliness indicates that the AZ-VDRS is generally doing well with the CDC's 180-day standard for case initiation. AZ-VDRS initiates its cases using death certificate (DC) data, and remains, on average, well-within the expected timeframe. The internal assessment of timeliness regarding the mean number of days to process medical examiner (ME) and law enforcement (LE) data demonstrated notable lags in data acquisition and entry. There are natural limitations to the timeliness of data from these sources, such as the lag-time from AZ-VDRS DC case initiation, and identifying and requesting from appropriate ME and LE sources. Additionally, the receipt of data from ME and LE sources is typically dependent on those respective agencies completing their internal processes, such as conducting and preparing autopsy and toxicology reports, or closing open homicide cases. The AZ-VDRS should work with their data partners to improve the timeliness of data delivery, where possible.

Data Representativeness

Ensuring that the AZ-VDRS data are representative of the State of Arizona, requires that as many medical examiners and law enforcement agencies as possible participate in submitting appropriate information/reports on suicides and homicides occurring within their jurisdiction. Keeping in mind that Arizona, while geographically large, has a relatively small number of counties (15) served by 11 medical examiners. As Exhibit 3 shows, about 91% of county medical examiners participate in the AZ-VDRS and over half (56%) of municipal law enforcement agencies participate, but less than half (40%) of the 15 county sheriffs and none of the tribal or federal agencies are participating in the AZ-VDRS (see Appendix for a list of participating agencies).

Exhibit 3: Participation and Representativeness of Agencies, 2016

Agency Type	n	% Participating	% Non-Participating
Medical Examiner	15	91.3[b]	16.7
Municipal LE Agency	61	56.0	44.0
Sheriff Offices [a]	15	40.0	60.0
Tribal LE Agencies	10	0.0	100.0
State/Federal Agencies	5	0.0	100.0

a The Apache County Sheriff's Office is counted as non-participating in this table, however AZ-VDRS had not actively sought independent participation because the Apache County ME provides the Sheriff's reports.
b Some counties do not have a formal medical examiner's office, and use contracted physicians to perform necessary autopsies. While AZ-VDRS has representation from all 15 counties, we do not currently have arrangements with all of the contracted doctors.

As is shown in Exhibit 4, participating municipal law enforcement agencies and sheriff's departments account for about 79% of all homicides and about 72% of all suicides in Arizona. Non-participating sheriff's departments account for about 10% of all homicides and 17% of all suicides in Arizona. Non-participating municipal agencies account for about 4% of homicides and 5% of suicides and tribal agencies account for about 5% of homicides and 3% of suicides in Arizona.

Exhibit 4: Percent of Violent Deaths Accounted for by AZ-VDRS Participating Agencies, 2016

		Homicides	Suicides
Participating			
	Municipal	69.8	58.4
	Sheriff	9.5	14.0
	Total	**79.4**	**72.4**
Non-Participating			
	Municipal	4.3	5.3
	Sheriff	9.5	16.6
	Tribal	5.2	3.0
	State/Federal Agencies	1.6	1.5
	Unknown Source	0.0	1.2
	Total	**20.6**	**27.6**

Observations and recommendations

Potential agencies that could be participating in the AZ-VDRS but are not, account for a sizable proportion of violent deaths in Arizona. Non-participating agencies account for just over one-fifth of all homicides in Arizona and just over one-fourth of all suicides. Data representativeness is further compromised by the distribution of non-participating agencies, given the magnitude of missing cases available from sheriff's offices. Specifically, sheriffs have jurisdiction in unincorporated, rural areas, therefore, this missing data creates an under-representation among rural populations of violent deaths. The AZ-VDRS should develop a strategic plan for the recruitment of non-participating agencies. This plan should detail recruitment tactics, timeliness, and realistic goals for increasing participation over the next three years. The plan should also prioritize agencies for recruitment and identify the resources to support the recruitment effort.

Data Quality

A major consideration in assessing data quality is the completeness of the data. The CDC uses two indicators of completeness as defined below.

1) **Circumstance Information** - The report assesses the percent of violent deaths that have at least one circumstance endorsed. This information may be unknown for some deaths because the investigation documents/finds no circumstances (e.g., body found and no witnesses).

2) **Descriptive Information** - The report classifies a violent death as having descriptive information if information on a few key descriptive variables is entered into the data system. These include victim demographics and a few additional descriptive variables that may change from time to time (e.g., injury location, homelessness, EMS presence at scene of injury). This indicator reflects the percent of violent deaths that have these descriptive victim and injury data entered.

Exhibit 5 presents 2016 Medical Examiner cases with no circumstances information, as defined by the CDC. The AZ-VDRS obtained circumstances data in about 90% of cases. In terms of raw numbers, there is considerable variation across Arizona counties in terms of those jurisdictions where

circumstances were missing. Two sub-indicators of circumstance completeness stand out: "No

Investigative Report" and "Insufficient Information Provided." The AZ-VDRS was missing circumstances

in 171 ME cases. About 46% of the time circumstances data was missing, the data was missing due to

insufficient information (i.e., missing data) being available in the case reports, and about 29% of the

time missing circumstances data was missing due to the ME not providing a death investigator's report,

which is a subsection of the ME records that provides detailed investigator notes.

Exhibit 5: Medical Examiner Cases with No Circumstance Data Endorsed, 2016

County	# of Cases	Total Homicides	Total Suicides	Unknown Source	No MOU	Investigation Not Concluded	No Autopsy Performed	No Investigative Report	Insufficient Info Provided	Tribal Land
Cumulative	**171**	**61**	**110**	**5**	**10**	**8**	**5**	**50**	**79**	**25**
Apache	16	5	9	0	0	0	0	5	0	11
Cochise	2	0	2	0	0	0	0	0	2	0
Coconino	5	0	5	0	0	0	0	2	0	3
Gila	11	1	7	0	0	1	3	6	1	0
Graham	10	0	10	0	10	0	0	0	0	0
Greenlee	0	0	0	0	0	0	0	0	0	0
La Paz	6	3	3	5	0	0	0	0	1	0
Maricopa	53	31	17	0	0	7	0	14	30	0
Mohave	6	3	2	0	0	0	0	0	6	0
Navajo	17	3	14	0	0	0	0	4	2	11
Pima	23	9	11	0	0	0	2	0	19	0
Pinal	18	1	16	0	0	0	0	18	0	0
Santa Cruz	0	0	0	0	0	0	0	0	0	0
Yavapai	15	2	12	0	0	0	0	1	14	0
Yuma	4	3	1	0	0	0	0	0	4	0
Unknown	1	0	1	0	0	0	0	0	0	0

Exhibits 6-8 report the CDC's quality assessment of the AZ-VDRS data, as defined as completeness of descriptive information and the inclusion of law enforcement and county medical examiner "Circumstances" information. The CDC assessment focuses on suicides, homicides and legal interventions (i.e., excluding undetermined and unintentional firearm manners of death). As discussed above, the performance indicators are categorized into "Poor", "Fair", "Good" and "Excellent" categories, and each state is compared to other states with the "State Ranking" across the whole system. The CDC measures 14 performance indicators, the three timeliness indicators discussed above, and 11 related to the completion of descriptive and circumstance data.

Exhibit 6 shows the results of 2016 AZ-VDRS performance on the three indicators used to measure the completion of descriptive information. The CDC defines this performance indicator by measuring the percentage of cases that have data entered for the victim's age, sex and race, the victim's homelessness status, whether the fatal injury occurred at home, whether emergency medical services were present at the scene and the type of location where the injury occurred. The AZ-VDRS performed exceptionally well in these indicators. For each, Arizona was tied as a top-ranked site, with 100% of cases having completed descriptive information, and earning "Excellent" ratings.

Exhibit 6: Completion of Descriptive Information[a] Performance, 2016

Manner of Death	Number of Deaths	NVDRS State Rank	Percent with Descriptive Info	Performance Category	Change from 2015
Violent Deaths [b]	1,705	1*	100.0	Excellent	0.2
Homicide / Legal Intervention	440	1*	100.0	Excellent	0.0
Suicide	1,265	1*	100.0	Excellent	0.3

[a] Completeness of descriptive information is defined as the percent of violent deaths with a coded response for each of the following variables: Age, Sex, Race, Injured at Home, Homeless, EMS at Scene, Veteran, and Injury Location Type.

[b] Excludes Unintentional firearm and Undetermined manners of death.

*Indicates that the state rank is a tie with one or more other states.

Exhibit 7 displays the performance results for the next four indicators. For homicides/legal

interventions and suicides each, the percentage of cases with at least one circumstance is coded from

coroner/medical examiner (CME) and law enforcement (LE) data sources. Circumstance data for both

CME and LE sources included a few dozen data elements, over a broad range of dimensions. For

example, circumstances include current and past mental health and substance abuse history, intimate

partner violence history (as victim or perpetrator), criminal activity of the victim or during the incident,

suicidal thoughts and attempts, and a variety of life stressors (e.g., job loss, financial problems,

homelessness, family relationship problems, etc.). If at least one circumstance was coded from CME or

LE data, then that case was credited as having circumstance data. The AZ-VDRS performed "Excellent"

on both homicides/legal interventions and suicides for CME data. AZ-VDRS ranked 5th and 12th among

homicides/legal interventions for CME and LE data, respectively, and ranked 14th and 21st among suicide

cases.

Exhibit 7: Percent of Violent Deaths [a] with CME and LE Circumstances, 2016

Manner of Death	CME Circumstances				LE Circumstances			
	Percent	NVDRS State Rank	Performance Category	Change from 2015	Percent	NVDRS State Rank	Performance Category	Change from 2015
Violent Deaths [a]	89.3	8	N/A	3.3	72.6	16	N/A	7.3
Homicide / Legal Intervention	86.4	5	Excellent	1.2	71.8	12	Good	10.7
Suicide	90.4	14	Excellent	4.2	72.9	21	Fair	6.3

[a] Excludes Unintentional firearm and Undetermined manners of death.

Exhibit 8 shows the last four performance indicators. These indicators again examine the site's

performance on homicides and suicides, and the completion of circumstance data. Here, the indicators

combine the cases to evaluate the proportion with at least one circumstance coded from either CME or

LE sources, and the proportion of cases with at least one circumstance coded from both the CME and LE

source. The AZ-VDRS ranked 6th among states, with an "Excellent" rating for homicides/legal interventions with at least one circumstance coded from either source. Among suicide cases, the AZ-VDRS ranked 15th, which was rated "Good." For the indicators measuring the percentage of cases with circumstance data from both CME and LE sources, the AZ-VDRS was rated "Good" for both homicides/legal interventions and suicides, ranking 7th and 18th, respectively.

Exhibit 8: Percent of Violent Deaths [a] with Either or Both CME and LE Circumstances, 2016

Manner of Death	Either CME or LE Circumstances				Both CME and LE Circumstances			
	Percent	NVDRS State Rank	Performance Category	Change from 2015	Percent	NVDRS State Rank	Performance Category	Change from 2015
Violent Deaths [a]	94.3	10	N/A	3.4	67.6	15	N/A	7.2
Homicide / Legal Intervention	93.6	6	Excellent	2.1	64.5	7	Good	9.7
Suicide	94.5	15*	Good	3.8	68.7	18*	Good	6.6

[a] Excludes Unintentional firearm and Undetermined manners of death.

*Indicates that the state rank is a tie with one or more other states.

Overall, of the 32 participating sites/states, the AZ-VDRS ranked 17th. This ranking was derived from a composite score constructed by the CDC from the 14 indicators related to the data timeliness and quality measures.

In addition to rankings, the percent change from one year to the next is used to assess performance. The CDC assessment provides a total of 18 change indicators, including the 14 performance indicators discussed, as well as four additional change percentages for circumstance data completion measuring the combined homicide and suicide manners of death. For the year 2016, the AZ-VDRS demonstrated positive change indicating improvement in 17 of the 18 of the performance indicators. The one indicator that did not show an improvement, was due to having had, and maintained, a 100% score (completion of descriptive information on homicide/legal intervention cases).

Data abstraction errors are another indicator of data quality, which are examined internally by the AZ-VDRS. Exhibit 9 provides data on the average number of abstraction errors for each abstractor

who worked on the AZ-VDRS during 2016 data collection. The internal process the AZ-VDRS uses to assess abstractor error rates relies on randomized re-abstractions. Each week, a randomized portion of abstracted cases is selected for re-abstraction. The abstractor team then reviews and abstracts the case individually, then come together to discuss their abstraction with the team. A consensus on the most appropriate coding is reached by the team, and where the original abstraction conflicts with the consensus coding, an error is recorded. From there, an individual's error rate is computed by averaging the number of errors recorded on their cases, divided by the number of cases they abstracted. This standardizes a "per case" number of errors, per abstractor. It is not possible to calculate the number of errors possible for cases, as there are numerous conditional variables that are dependent on other responses. For example, there are as many as 40 variables specifically related to the circumstances of unintentional firearm deaths, which would not be eligible for homicide, suicide or undetermined deaths.

The mean number of errors per case was 2.87, which, given the hundreds of potential variables, is interpreted as a very low average frequency of errors. There is little variation across abstractors, but it still serves as a useful tool for AZ-VDRS performance. The AZ-VDRS does continuous re-abstractions, and these accuracy and error performance reviews of its abstractor staff, in order to refine and improve performance. The re-abstraction processes are used as an on-going training tool, helping individual abstractors, as well as improving more consistent team-wide abstraction interpretation and coding. Exhibit 9 below shows the breakdown of DC, CME and LE data abstracted, by abstractor. The table then shows the number and percent of each abstractor's cases which were reviewed and re-abstracted. Finally, the table shows the mean number of errors per case, by abstractor.

Exhibit 9: Error Rates by Abstractor, 2016

	DC Cases Abstracted		CME Cases Abstracted		LE Cases Abstracted		Cases Reviewed		Mean Number of Errors
	N	%	n	%	n	%	n	%	n
TOTAL	1,913	100.0%	1,853	96.9%	1,349	70.5%	182	9.5%	2.87
ABSTRACTOR ID #									
1	493	25.8%	487	26.3%	315	23.4%	24	1.9%	3.08
2	0	0.0%	0	0.0%	165	12.2%	0	0.0%	0.00
3	0	0.0%	76	4.1%	117	8.7%	8	4.1%	5.88
4	139	7.3%	0	0.0%	0	0.0%	16	11.5%	2.81
5	79	4.1%	2	0.1%	0	0.0%	3	3.7%	2.00
6	46	2.4%	2	0.1%	0	0.0%	2	4.2%	3.00
7	140	7.3%	129	7.0%	60	4.4%	14	4.3%	3.57
8	192	10.0%	517	27.9%	109	8.1%	33	4.0%	3.39
9	136	7.1%	0	0.0%	1	0.1%	7	5.1%	2.57
10	350	18.3%	228	12.3%	195	14.5%	42	5.4%	2.71
11	116	6.1%	334	18.0%	325	24.1%	15	1.9%	3.53
12	0	0.0%	78	4.2%	62	4.6%	5	3.6%	4.20
13	67	3.5%	0	0.0%	0	0.0%	2	3.0%	1.50
14	155	8.1%	0	0.0%	0	0.0%	11	7.1%	1.91

Observations and Recommendations

Overall, data quality indicators including data completeness and timeliness and abstractor error rates indicate that the AZ-VDRS is generating quality violent death-related data and importantly, that the project is showing improvement overtime. However, the AZ-VDRS does not yet do as well on timeliness, an area that should be targeted. Those data quality/timeliness categories rated as "Fair," need careful monitoring and targeting for improvement. Some suggestions for increasing cooperation and involvement of data supplying agencies are made later in this report.

AZ-VDRS Data Dissemination and Use

An important activity of the AZ-VDRS is to share and interpret findings about violent death in Arizona with a variety of stakeholders, including participating law enforcement and medical examiner agencies, public health agencies, non-profit organization, and Arizona communities. The goal is to increase awareness of the extent and nature of violent death and to inform prevention policies and practices. The AZ-VDRS relies on multiple methods for sharing information with stakeholders. These include annual reports on homicide and suicide as well "Data-At-A Glance" reports on special topics (see the list below). Reports are disseminated in hard copy, emails, and are placed on the AZ-VDRS website. ASU media specialists work with AZ-VDRS to develop press releases distributed to media outlets in Arizona, and AZ-VDRS staff participate in television, radio and print interviews. Advisory board meetings are another means for disseminated AZ-VDRS findings and they are equally important for getting expert input into interpreting. Specific details on press releases and media presentations are not included, but in general, every major report generates as least one press release and one or more media interviews.

Exhibit 10: Public Dissemination

Reports	Date Released
2019 as of March 22nd.	
2016 Annual Report on Suicide in Arizona	March, 2019
2016 Annual Report on Suicide in Chandler	March, 2019
2016 Annual Report on Suicide in Cochise County	March, 2019
2016 Annual Report on Suicide in Coconino County	March, 2019
2016 Annual Report on Suicide in Flagstaff	March, 2019
2016 Annual Report on Suicide in Gilbert	March, 2019
2016 Annual Report on Suicide in Glendale	March, 2019
2016 Annual Report on Suicide in Lake Havasu City	March, 2019
2016 Annual Report on Suicide in Maricopa County	March, 2019
2016 Annual Report on Suicide in Mesa	March, 2019
2016 Annual Report on Suicide in Navajo County	March, 2019
2016 Annual Report on Suicide in Mohave County	March, 2019
2016 Annual Report on Suicide in Phoenix	March, 2019
2016 Annual Report on Suicide in Pima County	March, 2019
2016 Annual Report on Suicide in Pinal County	March, 2019
2016 Annual Report on Suicide in Scottsdale	March, 2019
2016 Annual Report on Suicide in Surprise	March, 2019
2016 Annual Report on Suicide in Tempe	March, 2019
2016 Annual Report on Suicide in Tucson	March, 2019
2016 Annual Report on Suicide in Yavapai County	March, 2019
2016 Annual Report on Suicide in Yuma County	March, 2019
2016 Annual Report on Suicide in Yuma	March, 2019
Internal Evaluation Report	March, 2019
2018	
Annual Suicide Summary Report, 2016 (revised)	Dec., 2018
Annual Homicide Summary Report, 2016 (revised)	Dec. 2018
Annual Suicide Summary Report, 2015 (revised)	Nov., 2018
Data-At-A-Glance, Violent Deaths Involving Veteran Victims: 2017	Nov., 2018
Data-At-A-Glance, 2017: Violent Deaths in Coconino County	April 1, 2018
Annual Homicide Summary Report 2015 (revised)	March 12, 2018
Data-At-A-Glance, Violent Deaths Involving Veteran Victims: Jan. 1, 2017 – Aug. 31, 2017	March 9, 2018
2017	
Data-At-A-Glance, Violent Deaths Involving Veteran Victims: Jan. 1, 2016 – Dec. 31, 2016	Nov. 8, 2017
Data-At-A-Glance, 2016: Violent Deaths in Coconino County	May, 2017
Data-At-A-Glance, 2015-2016: Violent Deaths among Victims 19 and Under	April 10, 2017
Data-At-A-Glance, 2015 – June 30, 2016: Violent Deaths Involving American Indian Victims	April 9, 2017
Custom report for AHCCCS	March, 2017
Data-At-A-Glance, Violent Deaths Involving Veteran Victims: January 1, 2015 – June 30, 2016	Nov. 22, 2016
Data-At-A-Glance, 2015: Violent Deaths among Older Adults	Nov. 1, 2016
Data-At-A-Glance, 2015: Violent Deaths in Coconino County	Oct. 18, 2016

Meetings	Dates
Suicide Workgroup	March 29, 2018
Homicide Workgroup	September 27, 2017
General Advisory Board	10/31/14; 9/3/15; 8/25/16; 3/29/16; 5/25/16
WPIPN Conference	November 18, 2016
Four Corners Indian Country Conference	March 2, 2016
Regional Meeting: Northern Arizona (Flagstaff)	April 8, 2015
Regional Meeting: Southern Arizona (Tucson)	March 11, 2015
Regional Meeting: Central Arizona (Phoenix)	February 26, 2015
Executive Committee Meeting	September 18, 2014

Observations and Recommendations

Although there have been numerous reports and meetings where AZ-VDRS findings are presented, the regularity of these is somewhat uneven. Current efforts to automate reports of county-level findings should result in an important and regular dissemination tool. The current efforts to improve and update the host (Center for Violence Prevention and Community Safety) website is another important development that should increase and improve the dissemination of AZ-VDRS on a regular basis.

The AZ-VDRS should develop an annual plan for information dissemination. The plan should identify the specific reports that will be prepared (much like the one prepared in 2017) and disseminated, date deadlines for first drafts, draft review, revisions, and final versions of each report. Placement on the CVPCS/AZ-VDRS website should be routinized and email lists of targeted recipients should be updated on a regular basis. Email "blasts" of reports to targeted recipients should be routinized. The annual plan should also contain specific dates for advisory board and working group meetings. At present, the AZ-VDRS does not have a system for assessing the usefulness the information that it disseminates through reports. The use of analytics for webpage access should be considered, and an automated 2-6 question survey of "usefulness" should be automated and follow emailed

report/information dissemination with a 2-3 week period. Developing, implementing, and assessing the comprehensive strategic plan will require committing resources for those purposes, and assigning responsibility (and accountability) for these activities to a single staff member is probably the best way to ensure that useful information is produced, disseminated, and evaluated on a systematic basis. Perhaps, this organizational function can be assigned to the "report writer" position depicted in the AZ-VDRS organizational chart provided in the next section. Stakeholder meetings should be held on a regular/predictable basis and meeting dates and topics should be part of the annual dissemination plan.

AZ-VDRS Organization and Staffing

The AZ-VDRS is a project of the Center for Violence Prevention and Community Safety (CVPCS), which is a unit within the Watts College of Public Service and Community Solutions at Arizona State University. The mission of the CVPCS is to engage in research, training, and technical assistance that informs policies and practices aimed at preventing violence within communities, not only within the United States, but in other nations as well. Historically and at present, the CVPCS has a strong presence in Latin America and Caribbean nations.

The AZ-VDRS is staffed with a combination of full-time CVPCS staff and part-time students. Exhibits 11 and 12 are organizational charts depicting the staffing and reporting lines as well as project responsibilities. The CVCPS Director (Charles Katz) serves as the Principal Investigator for the AZ-VDRS project. Other staff include a Report Writer/Phoenix Police Report Abstractor, a Lead Abstractor, an Analyst, and an Internal Evaluator. No project staff are dedicated to the project on a full-time basis. Full-time CVPCS staff (Director, Report Writer, Internal Evaluator dedicate part of their time to the project as they are involved in other CVPCS projects and the Director and Internal Evaluator also have faculty appointments in the School of Criminology and Criminal Justice. The Lead Abstractor is part-time (32 hour per week) on the project, as is the Analysist (20 hours per week) and the seven data abstractors, who are students, and typically work between 20 and 25 hours per week.
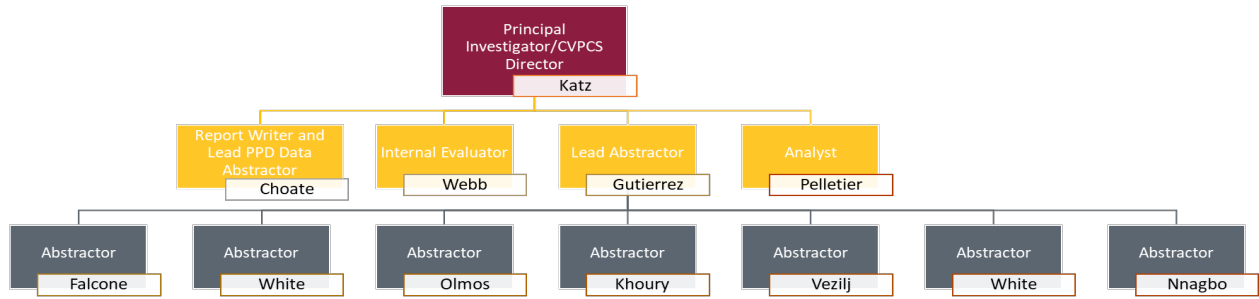
Exhibit 11: AZ-VDRS Organizational Chart

Exhibit 12: AZ-VDRS Responsibilities, by Abstractor

Abstractor Supervisor M. Gutierrez	**Lead Abstractor D. Falcone**
Hiring/Interviews	Training
Case assignment	Case assignment
Accuracy checks	Accuracy checks
Lead weekly abstractor meeting	ME data management
Attend CDC state/coding workgroup calls	Abstraction
Download DC data	Data cleaning
Clean and import DC data	Picks up cases from agencies
LE data management	Generates 20 cases/week
Run syntax for data cleaning	Graduates December 2019
Data cleaning	
Abstraction	**Abstractor D. White:**
Generates At-a-Glance reports	Abstraction
Generate weekly dashboards	Accuracy checks
Generate monthly abstractor evaluation reports	Data cleaning
	Generates 23 cases/week
Abstractor G. White	Social media updates
Abstraction	Graduates May 2019
Accuracy checks	
Generates 24 cases/week	**Abstractor J. Olmos:**
Graduates December 2019	Abstraction
	Accuracy checks
Abstractor A. Khoury:	Obtaining FIPS Codes
Abstraction	Generates 8 cases/week
Accuracy checks	Graduates December 2018
Data cleaning	
Case scanning	**Abstractor A. Vezilj:**
Graduates May 2019	Abstraction
	Accuracy checks
Abstractor L. Nnagbo:	Data cleaning
Abstraction	Generates 17 cases/week
Accuracy checks	Graduates May 2020
Data cleaning	
Generates 9 cases/week	
Graduates December 2019	

Although the abstractors are students, their tenure working on the AZ-VDRS is long enough for them to develop the expertise necessary to produce quality data in a timely manner. The median length of stay of abstractors is 13 months, and the average length of stay is 16.13 months. While the majority

(60%) of abstractors leave due to graduating, about 27% resign and 13% are assigned to a new project or leave the Center.

Observations and Recommendations

In terms of organizational location and structure, the AZ-VDRS is located within an appropriate unit of Arizona State University, the Center for Violence Prevention and Community Safety, given the Center's mission and focus on applied research targeting violence prevention and community safety. The AZ-VDRS is an efficient and cost-effective organization producing useful quality data bearing on the etiology of and related prevention policy of suicide and homicide in Arizona and in the United States. The organizational structure of the AZ-VDRS is relatively flat enabling direct control of operations by the project director. The current organizational structure is an improved modification of the original structure that was somewhat more hierarchical. Some AZ-VDRS staff recommended modifying the original organizational structure so that there was more of a direct line of reporting to the director. As some put it, they wanted "one person to be in charge," and the changes made would seem to accomplish that end.

One other important change in the AZ-VDRS organizational structure is designating a staff position as a "Report Writer." This change should enhance the project's productivity in information dissemination, which is of critical importance to AZ-VDRS stakeholders. Likewise, designating a single staff position to be the abstractor for Phoenix Police Department (PPD) violence death reports, and embedding that person in an office within PPD, enhances the project's capacity for entering large amounts of data from the PPD. The current plan is to employ a research technician who will serve as the PPD abstractor should enable meeting the goals of completeness, timeliness, representativeness, and usefulness with regard to PPD violent death reports.

Reducing turnover among student abstractors is a significant challenge for AZ-VDRS. As noted above, their tenure working on the project seems reasonably long given that they are first and foremost students. Maintaining a continuous recruitment process is probably the best way to ensure that the AZ-VDRS has a sufficiently large and well-trained compliment of abstractors. Although providing students with research experience is only a secondary or tertiary goal of the AZ-VDRS, as a unit within Arizona State University it is important to provide students with the sort of a hands-on research opportunity provided by the project. As a side-note, it is important to inform the larger university of the role that AZ-VDRS plays in providing students with a hands-on research experience, one that not only serves Arizona communities, but one that is part of a larger national effort.

Conclusion

Overall, the AZ-VDRS is on track to become one of the premier NVDRS sites. Its current ranking by the CDC places it in about the 50th percentile of all NVDRS sites. Most assessment indicators demonstrate positive change since the project was implemented. Recent and planned changes in organizational structure should result in improvements in all areas of operation. Continuous improvement in data completeness, representativeness, and usefulness is a realistic goal for the AZ-VDRS. The high quality data that it produces benefits Arizona by providing critical information to public health and criminal justice officials. In addition, the high quality data that the AZ-VDRS produces will enable researchers to probe more deeply into the problem of violent deaths and with the goal of reducing its occurrence.

The AZ-VDRS will continue to face challenges in addressing the data quality goals of completeness, timeliness, representativeness, and usefulness. Internal strategic planning can play an important role in meeting these goals. The planning process should address each of these goals and specify the steps to be taken to meet them. The outcome of the planning process should include annual

plans for increasing agency participation and for information dissemination. With regard to the former, the AZ-VDRS should broaden its recruitment outreach to involve municipal and county officials in addition to their respective law enforcement agencies. With regard to recruiting tribal agencies, consideration should be given to involving the Arizona Inter-Tribal Council (http://itcaonline.com) and the Arizona State University Office of American Indian Initiatives (http://americanindianaffairs.asu). Finally, it is hoped that information contained in this report can serve as one of several benchmarks for the continuous assessment of AZ-VDRS data quality.