## Community Health Assessment of Globe, Miami, San Carlos

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Immersion Weekend August 2018

## Introduction

- Explored, assessed, and compared the communities of Miami,
   Globe, San Carlos by conducting a windshield survey,
   attending panel discussion, and performing additional research
  - Developed an understanding of community and region history
  - Analyzed current data and statistics
    - Demographics, physical environment, health status, and impact and implication for healthcare
- Created a foundation for development of a scholarly project



EAHEC
Scholars
guided by
community
members while
conducting a
windshield
survey in
August 2018

## History & Culture

#### **GLOBE:**

- Globe was founded in 1876 as a mining town and was incorporated in 1907
- Silver was the first mineral to be mined, and by the late 1880's copper predominated

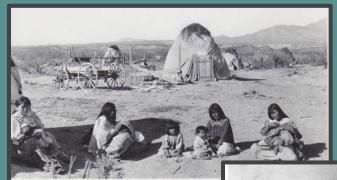
#### MIAMI:

 Miami was founded in 1907 and first developed by the Miami Land and Improvement Company, primarily due to the large porphyry deposits (there was a new process that was developed at that time that allowed copper to be extracted from porphyry ore)

#### **SAN CARLOS:**

- Historically there were seven Apachean tribes, and the Western Apache included the White Mountain-San Carlos.
- After the Indian Reorganization Act in 1934, the San Carlos Apache formed their own government and were then recognized as the San Carlos Nation







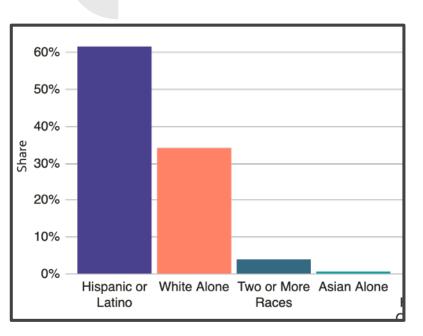


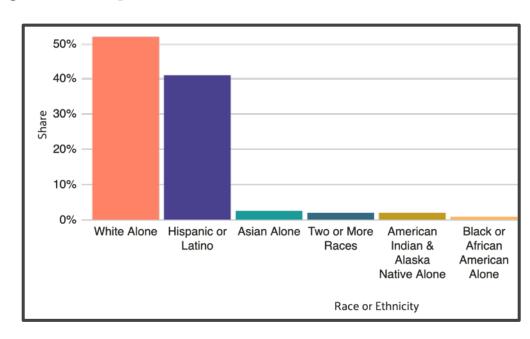


## **Statistics & Demographics**

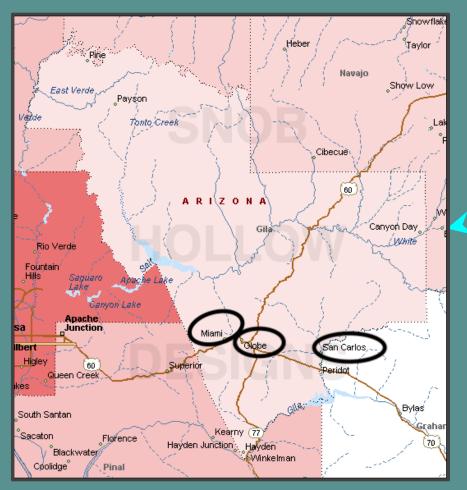
	Population	Median Age	Median Household Income	Poverty Rate	Most Common Education Level Achieved
Globe	7,369	44.5	\$42,557	20%	22.6% have a high school diploma
Miami	2,153	36	\$36,298	25.8%	24.7% have a high school diploma
San Carlos	10,218	N/A	\$26,875	3.6%	26.7% have a high school diploma

## Race and Ethnicity Comparison





The majority of Miami's population, shown on the left, identify as Hispanic/Latino. This is in contrast to Globe's population, shown on the right, which is predominately White. San Carlos residents identify as Native American.





- Globe (18.23 sq mi) is located in Gila county in southern Arizona, approximately 100 miles directly north of Tucson
- Miami (0.88 sq mi) is directly adjacent to Globe
- The San Carlos Indian Reservation is approximately 20 miles east of Globe. It is 1,834,781 acres and covers three counties: Gila, Graham, and Pinal

## Physical Environment and Utilities

- Mine tailings (ore waste) are visible throughout both towns, as mining is the dominant industry in the area
- The area suffered from poor air quality prior to 1999, but the quality has improved significantly between then and 2009
- Water
  - Miami & Globe: Arizona Water Company (AWC) deep groundwater aquifers
  - San Carlos Reservation: Central Arizona Project and Arizona Water, private wells
- Sewage
  - Miami & Globe: city sewers
  - San Carlos: septic tanks (not annually checked)

## **Health Status Themes**

- High incidence of sexual health related problems including:
  - STIs
  - Unplanned pregnancy
- High incidence of chronic conditions including:
  - Obesity
  - Diabetes
  - Hypertension/heart disease
  - Hyperlipidemia
- High incidence of mental health issues including:
  - Substance abuse teens and adults
  - Suicide

# Access to health facilities and insurance status

- Limited access to primary and specialty care, virtually no mental health services, multiple hospitals in the area
  - Hospitals: Cobre Valley & San Carlos
- The majority of the Globe and Miami populations are insured, while the San Carlos population is not
  - Insurance status impacts accessibility of health services and is a predictor of health outcomes

# Impact of Rural Setting on Healthcare Delivery & Outcomes

- Globe, Miami, and San Carlos are classified as medically underserved, which means there fewer than required medical services. This in turn impacts:
  - Wait time to receive care
  - Number of provider options for patients to choose between
  - Longer distance to be traveled to access speciality care
  - Increase in indirect cost to patients due to necessity of travel
  - Progression and worsening of health conditions, as well as cause potential irreversible complications due to lack of access to care

# Impact of Rural Setting on Healthcare Delivery & Outcomes

- Additionally, rural settings traditionally have less access to mental health care. In the Globe, Miami, and San Carlos areas these repercussion present as:
  - Higher incidence of substance use disorder (prescription opioids, alcohol, other street drugs)
  - Increase rates of addiction, substance use related death, accidents due to intoxication
  - Alarmingly high rate of overdose and overdose caused death

# How can we reduce the rate of overdose deaths?

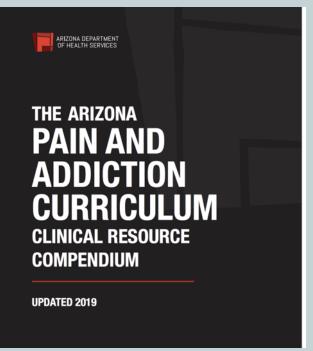
- Increase community education on the realities and dangers of substance use disorder
- Create treatment and detox facilities
- Teach emergency personnel and family members how to recognize overdose case and administer naloxone effectively
- Increase law enforcement presence to curb or stop the inflow of illicit substances
- Follow good controlled substance prescription practices

## Scholarly Project

To increase awareness of resources available for providers, pharmacists, residents, firefighters, and police to help combat the opioid crisis and improve outcomes.



## **Resources for Providers**



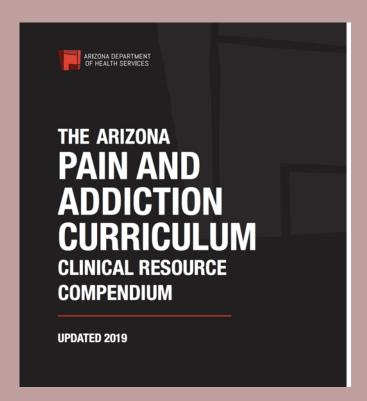
- Initially developed for a CME event provided by Arizona Department of Health Services.
- Now to be utilized by providers as a resource
  - Screening tools
  - Reference tables
  - Guidance when managing patients with pain an addiction

#### **FOREWORD**

This Resource Compendium is intended to a be a practical clinical reference for providers who are treating pain and opioid use disorder in the State of Arizona. It includes a range of materials from the standard reference tables of false positives in urine drug screens to Arizona-specific state laws and consultation services.

All resources included in this compendium come from verified, reputable agencies. Some agencies based their materials on other published studies; original sources are included in the notations on each page.

Of note, this Resource Compendium, along with the editions of The Arizona Pain and Addiction Curriculum and 2018 Arizona Opioid Prescribing Guidelines are public materials. They are nonproprietary and can be copied and distributed freely.



#### Some of What's Included In the Resource:

- Clinical evaluation tools
- Opioid and Benzodiazepine Pharmacology
- How To's
  - Approach a patient
  - Diagnose Opioid use disorder
- Naloxone
  - Standing Orders
  - Training for patients on use of Naloxone
- Arizona Laws and Regulatory Summary
  - A.R.S. 36-2228 Provides immunity for Physicians and nurse practitioners who issue standing order

# How to find a Medication Assisted Treatment (MAT) Provider



#### **Buprenorphine Practitioner Locator**

Find practitioners authorized to treat opioid dependency with buprenorphine by state.

Select a state from the map or use the drop down lists to view all of the practitioners waived to provide buprenorphine for the treatment of OUD in a city, state or zip code. To update the contact information for your waiver, complete the Update Practitioner Profile form.



## **Resources for Pharmacists**

#### **Standing Order:**



#### STANDING ORDERS FOR NALOXONE

This standling order is issued by Dr. Cara Christ, MD MS (NPI #1839369036), Director of Arizona Department of Health Services. The standling order authorizes any Arizona-licensed pharmacist to dispense naloxone to any individual in accordance with the conditions of this order.

Dispense one of the three following naloxone products based on product availability and preference.

For intranasal administration in children ≥5 years or ≥20kg; adolescents; adults
 Dispense: NARCAN™ 4mg/0.1mL nasal spray

Sig: For suspected opioid overdose, administer a single spray of Narcan in one nostril. Repeat after 3 minutes if no or minimal response.

Refills: PRN x 1 year

OF

<u>Dispense</u>: 2mg/2mL single dose Luer-Jet prefilled syringe. Include 1 Luer-lock mucosal atomization device per dose dispensed.

Sig: For suspected opioid overdose, spray 1 mL in each nostril. Repeat after 3 minutes if no or minimal response.

Refills: PRN x 1 year

For intramuscular injection in children ≥5 years or ≥20kg; adolescents; adults

<u>Disp</u>: 0.4mg/mL in 1mL single dose vials. Include one 3cc, 23g, 1" syringe per dose dispensed. 3g; For suspected opioid overdose, inject 1mL IM in shoulder or thigh, PRN opioid overdose. Repeat after 3 minutes if no or minimal response.

Refills: PRN x 1 yea

For intramuscular or subcutaneous injection in children ≥5 years or ≥20kg; adolescents; adults Disg: EVZIO™ 2mg/0.4ml. auto-injector, #1 Two-pack

Sig: For suspected opioid overdose, follow audio instructions from device. Place on thigh and inject 0.4mL. Repeat after 3 minutes if no or minimal response.

Refills: PRN x one year

Cara Christ, MD MS, Director of Arizona Department of Health Services

Effective date 11/07/18, Expiration date 11/07/20

Douglas A. Ducey | Governor Cara M. Christ, MD, MS | Director

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#### FAQ:



#### Frequently Asked Questions (FAQs)

Pharmacist Reporting

#### What am I required to report?

Pharmacists are required to report naloxone doses dispensed to the Prescription Drug Monitoring Program (PDMP). See <u>Reporting</u> for information on required reporters, health conditions to be reported, and reporting systems.

#### When are we required to report? As in, how long is the acceptable timeline between an incident and when we must submit the report?

Our request of you, and our goal as a Department, is for all reporters to submit a report within 5 business days. We understand that this may not always be possible, but request your assistance in obtaining timely and potentially life-saving data.

#### Does the reporting mandate include weekends?

For the purposes of reporting under Emergency Rule 9 A.A.C. 4, "business day" means the period from 8:00 a.m. to 5:00 p.m. Monday through Friday, and excluding state holidays.

#### Why is this now reportable?

On June 5, 2017, Arizona Governor Doug Ducey declared a <u>Public Health State of Emergency</u> due to the opioid epidemic. More than two Arizonans die every day due to opioid-related overdoses. An <u>Enhanced</u> <u>Surveillance Advisory</u> went into effect June 15, 2017 as a first step toward understanding the current burden in Arizona and to collect data to best target interventions. On October 9, 2017, emergency rules for opioid-related reporting were put in place.

#### Am I required to report every dose of naloxone I dispense?

No. Naloxone doses dispensed are required to be reported if they are in response to a suspected opioid overdose or provided for patients who may be at risk of an opioid overdose. If naloxone is dispensed for another purpose, like to reverse IV sedation or anesthesia, it does not need to be reported.

#### Do I need to report naloxone doses administered and/or dispensed in the situation where a physician retrieves naloxone from an automatic dispenser for a suspected opioid overdose (e.g. in the Emergency Department)?

Pharmacists are only required to report doses of naloxone they personally dispense and NOT the administration of naloxone (see <u>Reporting</u>). Therefore, in the situation where a physician retrieves naloxone from an automatic dispenser, there is no reporting required from the pharmacist.

Updated December 8, 2017

Douglas A. Ducey | Governor Cara M. Christ, MD, MS | Director

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## Resources for Law Enforcement/Fire/EMS

ARIZONA DEPARTMENT OF HEALTH SERVICES	First responder agencies (i.e., law enforcement/corrections, fire/EMS) whose staff have completed opioid overdose recognition and treatment training consistent with ADHS or AZ-POST standards, and do not have a mechanism to bill patients for naloxone administration, are eligible for free naloxone.*									
	Agency Name:									
	Agency SHIPPING Address- NO PO Box:									
AGENCY	Agency Director Name:									
INFORMATION										
	Tribal Agency?			Yes			☐ No			
	Agency's 2016 Estimated Service Population:									
		AGEN	CY TYPE							
Federal LE	State LE	County LE	Municipal LE			State ctions	<ul><li>Private</li><li>Corrections</li></ul>			
Fire Non-Transport	Fire with CON	Private Ambulance	County Ambulance			inicipal Ilance	Industrial EMS			
NALOXONE PROCEDURE	Agency has a Nalo	es	No							
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	Contact Email:									
TRAINING INFORMATION	Training Date(s): Number of Staff Train					rained: _	ed:			
	Total Staff Trained To-Date:									
	Training Used ADHS/AZPOST Curriculum?						☐ No			
NALOXONE REQUESTED	Description: Nalo	Quantity	Requested:							
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	& For Questions: § 2-364-1494 Attn: N			of Injury D	roventie:					
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	oenix, AZ 85007	t upon continued F	odoral and	State for	ding and	availabi	o cumply			
- Free n	aloxone contingen	t apon continued r	euerdi anu	state fun	uning and	availabi	e suppiy.			

### A.R.S 362228

- Allows LE officer or EMT to administer naloxone.
- Requires a standing order issued by physician or nurse practitioner.
- There is a statewide standing order for officers who have completed training
- Mandates training on proper administration of naloxone before LE or EMT may administer naloxone.
- States that LE or EMT may administer to a person if officer believes that the person is suffering from opioid-related overdose.

## Resources for Law Enforcement/Fire/EMS



February 3, 2020

Subject: Naloxone Leave Behind Program

Dear Arizona EMS Agencies:

Arizona law permits EMS agencies who have responded to an individual experiencing an opioid-related overdose ("at-risk person") to leave behind pre-packaged, intranasal naloxone (Narcan®) if the EMCT believes that it can be used in the future by the at risk person, family members, or friends to reverse an opioid overdose. The naloxone leave behind kit should include instructions on when and how it should be administered.

A.R.S. § 36-2266 is written broadly and allows the administrative medical director of an EMS agency to write a protocol for a naloxone leave behind program for patients or family members who may be at high risk for overdose. This is at the discretion of, and requires the approval from the agency's administrative medical director.

An EMS agency that is interested in implementing a naloxone leave behind program, but does not have administrative medical direction, may approach the Department for assistance if they qualify under A.R.S. 8.36-2202(K).

Sincerely.

Terry Mullins, Chief
Bureau Chief
Bureau of EMS & Trauma System
Arizona Department of Health Services

Terry Mullin

Gail Bradley, M.D., FACEP, FAEMS Medical Director Bureau of EMS and Trauma System Arizona Department of Health Services

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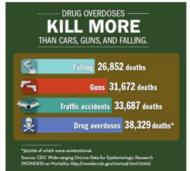
Bureau of Emergency Medical Services and Trauma System

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# USE OF NALOXONE BY LAW ENFORCEMENT FOR OPIOID OVERDOSE









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## A background on Naloxone aka Narcan

- What is naloxone?
  - Naloxone, also known as Narcan®, is a drug to treat the effects of opioids and can save the life of someone overdosing on opioids. The enhanced surveillance also allows us to track how many times naloxone has been dispensed by a pharmacist or given to someone who may be suffering from an opioid overdose.
- What is the difference between naloxone administration and dispensing?
  - Naloxone Dispensing is when a pharmacist provides a package and/or "kit" of naloxone/Narcan® to someone for them to have and keep for their use in an emergency (or in case a friend or family members needs it). Pharmacists may also dispense naloxone to certain community-based organizations so that the organizations can then provide the kits to people who may need them. ADHS's
  - Naloxone/Narcan® administration is the act of getting a medication (in this case naloxone) into a person's bloodstream.

## How is naloxone administered?

Naloxone

### 4 Types of Naloxone









Click on the Naloxone you will be using to learn more



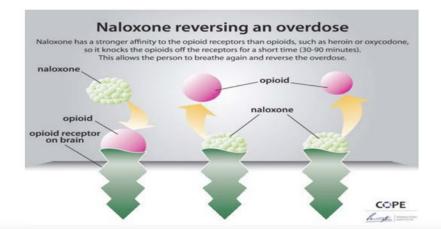
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- Depending on the packaging, naloxone/Narcan® can be administered in one of three ways:
  - (1) Via a mist sprayed into a person's nose;(for the out-of-hospital setting)
  - (2) Via an injection directly into a person's muscle usually in the top of their upper thigh or in the muscular portion of their upper arm or shoulder; (for the out-ofhospital setting)
  - (3) Via a needle that has been placed into a person's vein, usually on the inside of their arm. (for certified/licensed healthcare professionals)

## **How Does It Work?**

- Blocks effects of opioids on brain
- Temporarily reverses respiratory and CNS depression







Arizona Department of Health Services. (2018). Globe Primary Care Area (PCA). Retrieved from https://azdhs.gov/documents/prevention/health-systems-development/data-reports-maps/primary-care/gila/24.pdf

Arizona Department of Health Services. (2018). San Carlos Apache Tribe Primary Care Area (PCA). Retrieved from https://azdhs.gov/documents/prevention/health-systems-development/data-reports-maps/primary-care/gila/25.pdf

Arizona Department of Health Services. (ADHS, 2018). Preventative services. Retrieved from https://www.azdhs.gov/documents/prevention/health-systems-development/data-reports-maps/reports/datadocu.pdf

BCT Consulting, Inc. (n.d.). City of Globe. Retrieved March 15, 2019, from http://www.globeaz.gov/visitors/information

Buprenorphine Practitioner Locator. (n.d.). Retrieved March 28, 2020, from https://www.samhsa.gov/medication-assisted-treatment/practitioner-program-data/treatment-practitioner-

locator?field\_bup\_physician\_us\_state\_value=AZ&field\_bup\_physician\_city\_value=&distance[postal\_code]=&distance[search\_distance]=10&distance[search\_units]=mile&page=2

City-Data. (2014). Globe, Arizona. Retrieved from http://www.city-data.com/city/Globe-Arizona.html

City-Data. (2010). Miami, Arizona. Retrieved from http://www.city-data.com/city/Miami-Arizona.html

City-Data. (2016). Miami, Arizona. Retrieved March 5, 2019 from http://www.city-data.com/health-nutrition/Miami-Arizona.html

City of Globe, AZ. (n.d.). Retrieved March 10, 2019, from http://www.globeaz.gov/

Coil, D., Lester, E., Higman, B., & Mattox, A. (2010, December 5). Mine Tailings. Retrieved March 12, 2020, from http://www.groundtruthtrekking.org/lssues/MetalsMining/MineTailings.html

Data USA. (2014). Globe AZ & Miami AZ. Retrieved from https://datausa.io/profile/geo/globe-az/?compare=miami-az

Data USA. (2016a). Globe, AZ. Retrieved from https://datausa.io/profile/geo/globe-az/

Data USA. (2016b). Miami, AZ. Retrieved from https://datausa.io/profile/geo/miami-az/

Data USA. (2016c). San Carlos, AZ. Retrieved from https://datausa.io/profile/geo/san-carlos-az/#housing

Educational Attainment for the Population 25 Years and Over. (n.d.). Retrieved March 9, 2020, from https://censusreporter.org/data/table/?table=B15003&geo\_ids=16000US0446350&primary\_geo\_id=16000US0446350

Frequently Asked Questions (FAQs) Pharmacist Reporting. (2017, December 8). Retrieved from https://azdhs.gov/documents/prevention/womens-childrens-health/injury-prevention/opioid-prevention/opioid-faqspharmacists.pdf

Frequently Asked Questions Naloxone. (2017, July 3). Retrieved March 28, 2020, from https://azdhs.gov/documents/prevention/womens-childrens-health/injury-prevention/opioid-prevention/opioid-naloxone-faq.pdf

Gila County (2016) Gila County Community Health Assessment (CHA) and Community Health Improvement Plan (CHIP). Retrieved from

http://agenda.gilacountyaz.gov/docs/2016/WORKSESS/20160531\_271/3710\_Gila%20BOS\_CHA%20and%20CHIP\_5\_31\_16.pdf

Globe, AZ. (n.d.). Retrieved from https://datausa.io/profile/geo/globe-az/

Globe Arizona. (n.d.). Retrieved March 15, 2019, from https://westernmininghistory.com/towns/arizona/globe/

Globe, AZ Air Quality. (n.d.). Retrieved March 12, 2019, from http://www.usa.com/globe-az-air-quality.htm

Globe-Miami (n.d.). Retrieved March 5, 2019 from http://www.globemiamichamber.com/about-globe-miami

Healthy People (2018) Social Determinants of Health. https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health

Library of Congress (n.d) https://www.discovergilacounty.com/san-carlos-apache-tribe

Miami Arizona. (n.d.). Retrieved March 15, 2019, from https://westernmininghistory.com/towns/arizona/miami/

Miami, AZ Air Quality. (n.d.). Retrieved March 12, 2019, from http://www.usa.com/miami-az-air-quality.htm#epaaqi

Miami, AZ. (n.d.). Retrieved from https://datausa.io/profile/geo/miami-az/

NALOXONE REQUEST FORM. (2018, June 20). Retrieved March 28, 2020, from https://www.azdhs.gov/documents/prevention/womens-childrens-health/injury-prevention/opioid-prevention/order-naloxone.pdf

Pinal Creek | Site Hydrogeology. (n.d.). Retrieved March 12, 2019, from https://azdeq.gov/pinal-creek-site-hydrogeology

Public Domain (n.d). Retrieved from https://commons.wikimedia.org/w/index.php?curid=8297940

Old Dominion Mine Globe (n.d) https://www.azfamily.com/old-dominion-mine-globe-arizona/image\_91ae57e6-1d3d-11e9-b69a-b3ade9a000cc.html

Oliff, H. (n.d.). Reservation Series: San Carlos Apache « Native American / American Indian Blog by Partnership with Native Americans. Retrieved March 15, 2019, from http://blog.nativepartnership.org/reservation-series-san-carlos-apache/

San Carlos, AZ. (n.d.). Retrieved from https://datausa.io/profile/geo/miami-az/

San Carlos, CA Air Quality. (n.d.). Retrieved from http://www.usa.com/san-carlos-ca-air-quality.htm

San Carlos Apache Indian Reservation. (2019, March 01). Retrieved March 15, 2019, from https://en.wikipedia.org/wiki/San\_Carlos\_Apache\_Indian\_Reservation

San Carlos Apache Tribe. (n.d.). Retrieved from http://itcaonline.com/?page\_id=1177

Standing Orders for Naloxone . (n.d.). Retrieved March 28, 2020, from https://www.azdhs.gov/documents/prevention/womens-childrens-health/injury-prevention/opioid-prevention/naloxone-standing-order.pdf

THE ARIZONA PAIN AND ADDICTION CURRICULUM CLINICAL RESOURCE COMPENDIUM. (2019). Retrieved March 28, 2020, from https://www.azdhs.gov/documents/audiences/clinicians/continuing-education/adhs-5419.pdf

Town of Miami, AZ. (n.d.). Retrieved March 10, 2019, from http://miamiaz.gov/

United States Census Bureau (2017). US Census 2010. Washington, DC: Government Printing Office

Use of Naloxone by Law Enforcement for Opioid Overdose Training . (2019, May 23). Retrieved March 28, 2020, from https://azdhs.gov/documents/preparedness/emergency-medical-services-trauma-system/training/naloxone.pdf