



California Tribal Epidemiology Center

Newsletter

fall 2019

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DIRECTOR’S MESSAGE

The theme of this newsletter addresses an important topic that is impacting Tribal communities in California and across the United States. In 2017, Health and Human Services declared a nationwide public health emergency regarding the opioid crisis. Many of us may know of someone, a family member or friend, who is suffering from an opioid addiction. The number of deaths related to opioid misuse is increasing among American Indians and Alaska Natives in California from 55 reported deaths in 2013 to 77 in 2017. The first two articles delve into the neurological process that leads toward addiction to opiates and demystifies how opiate antagonists are used to treat such addictions. These are followed with “need to know” information to help us identify signs of opioid abuse and stages and symptoms of opiate withdrawal. This newsletter presents two program spotlights: Indian Health Council, Inc. and Fresno American Indian Health Project, both of which are working to address opioid addiction in their Tribal communities. It is with great hope that these featured articles will help alleviate the social stigma around opioid addiction and medication-assisted treatment.

This newsletter includes a 1-page insert on Narcan that explains what it is and how it is administered to an individual experiencing an opioid overdose. It also includes an infographic on vaping and the dangers of using vaping products. This infographic was developed in response to the Centers for Disease Control’s recent announcement of an outbreak in lung injuries associated with vaping. Lastly, there is an update on CTEC’s successful Summer Research Assistant Program and current projects. Please continue to reach out to us for your training and technical assistance needs.

In community spirit,

Vanesscia Cresci

Vanesscia Cresci, MSW, MPA
Acting Epidemiology Manager, California Tribal Epidemiology Center
Director, Research and Public Health Department

THE SCIENCE OF ADDICTION

By Leann Cornelius, MS

Opioid addiction has reached epidemic proportions in the United States. Neurological and genetic research has provided an increased understanding of what causes drug addiction in the brain. This article explains what leads to addiction and why it can be so difficult to treat.

Addiction is a chronic brain disorder that is characterized by compulsive drug seeking and use despite any adverse consequences that may occur because of that use.¹ Addiction can occur with many different substances, including nicotine, alcohol, and drugs, both illicit and prescription. While research has been advancing the scientific understanding of what causes addiction, there is still a gap in understanding between scientific facts and the public perception about drug use.²

Although addictive substances have varying effects, virtually all addictive substances work by affecting a single pathway in the brain: the pathway that regulates the “rewards system.”² In order to survive, humans must pursue certain instincts that are beneficial, such as finding food and shelter. When these goals are achieved the body experiences a pleasurable feeling that is caused by the release of dopamine in the brain.³ Once released, dopamine binds to receptors in the brain, creating a euphoric feeling that assigns value to that action, and motivates people to continue performing those actions in order to receive “rewards.”³

Addictive substances like opioids have no survival value for the body, but they act as a ‘Trojan horse’ by binding to the dopamine receptors in the brain and creating a much stronger euphoric feeling than any other action can achieve.³ For example, the normal range of dopamine can go from a high of approximately 100 ng/dl, which can be caused by something positive

like winning the lottery, to a low of 40 ng/dl, which would be experienced by someone having a very bad day.⁴ When someone uses an opioid the brain can produce as much as 1000 ng/dl of dopamine.⁴ In response to these high levels of dopamine, the brain seeks to stabilize by decreasing the amount of dopamine that is released in response to future stimuli.⁴

Because of this decrease in released dopamine, it becomes impossible for continued opioid use to result in the same high experienced from the first use. Opioid users begin continuously

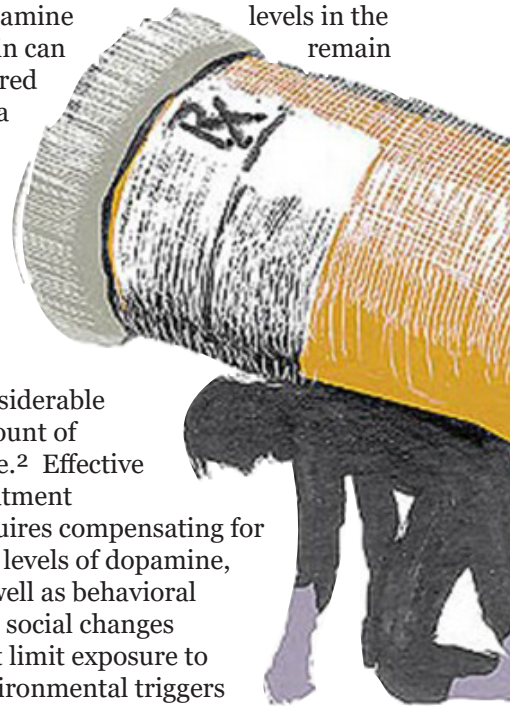
“With a risk of relapse remaining even years after sobriety has been reached, it is important to view opioid users as in recovery rather than ‘cured’...”

increasing the amount of opioids to try and achieve the same euphoric feeling, which consequently results in continuously decreasing levels of dopamine in the brain. As dopamine production in the brain decreases, it becomes harder for users to maintain dopamine levels within the normal range of 40-100 ng/dl. Everyday tasks no longer feel rewarding, and the only action that can raise dopamine levels within the normal range is

continued opioid use. Opioid users begin experiencing dopamine levels that are lower than levels one would experience on the worst day of their life, which causes them to prioritize opioid use over any other activity.³ According to Dr. Corey Waller, “These patients are in survival mode. People in survival mode do crazy things.”⁴

It is this physical change in the brain that make it extremely difficult for opioid users to quit because once an individual stops using opioids, the dopamine levels in the brain can remain altered for a

considerable amount of time.² Effective treatment requires compensating for low levels of dopamine, as well as behavioral and social changes that limit exposure to environmental triggers that have become associated with drug use.² With a risk of relapse remaining even years after sobriety has been reached, it is important to view opioid users as in *recovery* rather than *cured*, and to continue providing them with treatment and support long after opioid use has stopped.

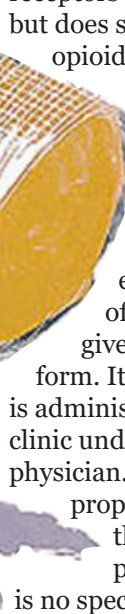


MEDICATION-ASSISTED TREATMENT

By Alejandra Cabrera, MPH

Opioid addiction is incredibly difficult to overcome alone. Medication-Assisted Treatment (MAT) is a treatment option that can support individuals in overcoming opioid dependency and addiction. This article explains what MAT is and how it works.

Research shows that when MAT is combined with counseling and behavioral therapies, it can support recovery, prevent relapse, and reduce the risk of overdose among those struggling with opioid misuse.¹ There are three commonly used MAT options that can be tailored to fit the unique needs of each patient. The three types include: methadone, buprenorphine (Suboxone, Subtex, Zubsolv), and naltrexone (Vivitrol). Below are brief descriptions of the three types of MAT:



Methadone is a full opioid agonist, which means it activates the same receptors that other opioids bind to but does so slower than prescription opioids or heroin. Methadone tricks the brain into thinking it is still getting the opioid and lessens the painful symptoms of withdrawal, reduces cravings, and blocks the euphoric (high) effects of opioids. Methadone is given in a pill, wafer, or liquid form. It is taken once a day and is administered at a methadone clinic under the supervision of a physician.^{4,2} Methadone has addictive properties, so it is important that it is used exactly as prescribed. Although there is no specific treatment duration, the Substance Abuse and Mental Health Services Administration (SAMHSA) recommends a minimum of 12 months.⁵

Buprenorphine is a partial opioid agonist, which means it binds to and activates opioid receptors but does

so less strongly than full agonists, such as methadone. Buprenorphine also reduces withdrawal symptoms and cravings and blocks the euphoric feeling. Unlike methadone, a person does not need to visit a clinic for a daily dose. Buprenorphine can be prescribed or dispensed by a qualified U.S. physician in various settings: physician's office, community hospital, health department, or correctional facility. Buprenorphine is taken daily as an oral pill, a film placed under the tongue, or as a six-month implant in the upper arm.³ The duration of treatment varies from person to person and is something that should be discussed and established by the person and their treatment plan team.

“A common misconception is that MAT just trades one addiction for another”

Naltrexone is an antagonist opiate blocker, which means it binds to opioid receptors in the body and completely blocks the euphoric and sedative effects of an opioid. Naltrexone is given as a monthly shot, but a person must be opioid-free for 7-10 days prior to getting the first shot. If a person relapses and uses an opioid, naltrexone will prevent the high feeling in the body. There is no abuse or potential diversion

(illegal selling or distribution) with naltrexone.⁴ The duration of treatment varies from person to person and is something that should be discussed and established by the person and their treatment plan team.

Although research shows that MAT, when combined with behavioral interventions, is effective at reducing opioid addiction, there is still doubt and fear associated with the use of MAT. A common misconception is that MAT just trades one addiction for another. The National Institute on Drug Abuse (NIDA) states that when someone is treated for an opioid addiction, the dosage of medication used does not get them high. Instead, these medications restore balance to the brain, allowing the patient's brain to heal while working toward recovery.⁵ Taking medication for opioid addiction is like taking medication for any other chronic disease, such as diabetes or asthma. Another common myth is that MAT should only be used as short term treatment. Research indicates that patients who use MAT for 1-2 years have a greater rate of long-term success and can work toward improving their quality of life, level of functioning, and the ability to handle stress. Some also argue that MAT will increase the risk of overdose in patients. Evidence shows that the opposite is true. For example, when buprenorphine was made available in Baltimore in 2009, heroin-related overdose deaths decreased by 37 percent.⁵ It is important to understand the difference between the types of MAT and determine which best fits the patient's needs.

OPIOID ADDICTION: What You Need to Know

By Elaina Gueyger, CTEC Summer Research Assistant

COMMONLY ABUSED OPIATES

(Synthetic)

Fentanyl

(Prescribed)

Codeine

Hydrocodone

Hydromorphone

Meperidine

Morphine

Oxycodone

(Illegal)

Heroin

OVERDOSE SYMPTOMS

Pinpoint pupils

Respiratory depression

Unconsciousness

Please refer to the insert provided in this newsletter, Narcan 101, on what to do if someone is experiencing an opioid overdose.

Signs of Opioid Abuse

- Needle marks on arms and legs from intravenous (injected) use
- Constricted, “pinpoint” pupils
- Having trouble staying awake or falling asleep at inappropriate times
- Flushed, itchy skin
- Withdrawing from social activities that were once enjoyed
- Sudden and dramatic mood swings that seem out of character
- Impulsive actions and decision-making
- Engaging in risky activities, such as driving under the influence
- Visiting multiple doctors in order to obtain more prescriptions

Withdrawal Symptoms

- Agitation, anxiety, irritability
- Nausea, vomiting, diarrhea
- Muscle spasms, tremors, abdominal cramps
- Insomnia
- Runny nose
- Sweating
- Fluctuating blood pressure
- Stomach aches
- Constricted pupils

Resources

www.addictioncenter.com

www.medlineplus.gov

www.webmd.com



Opiate V

Stage of Withdrawal	When it Occurs
Anticipatory	3 to 4 hours after last dose
Early acute	8 to 10 hours after last dose
Fully-developed acute	1 to 3 days after last dose
PAWS Post Acute Withdrawal Syndrome	Up to 24 months after last dose

SAVE THE DATE 3rd DATA EVALUATION AND ANNUAL GRANTWRITING TRAINING

Strengthen your capacity for grant writing, data utilization, and program evaluation to support health promotion efforts serving American Indian & Alaska Native communities across California. Lodging & travel expense reimbursement is provided on a limited basis.

March 24-25, 2020
Location TBD

FOR MORE INFORMATION, CONTACT:
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fast facts

In 2016, an estimated 48.5 million persons in the U.S., or 18.0% of persons aged 12 years and older, reported use of illicit drugs or misuse of prescription drugs in the past year.¹

The increase in tolerance, costs, and limited supplies of prescriptions, for opioids, often leads to the use of heroin. Heroin is used to avoid withdrawal symptoms, is much cheaper and easily accessible compared to prescribed medications.²

Mortality data indicates AIANs in California have rates of opioid overdose deaths higher than the state average.³

Fentanyl was the primary driver behind the increase of synthetic opioid overdoses with an estimated rise of 45.2% from 2016-17.⁴

Withdrawal Timeline

Description of Symptoms
The anticipatory stage is marked by increased anxiety or fear related to oncoming symptoms of withdrawal. This stage is also characterized by cravings and drug-seeking behavior.
Anxiety and restlessness begin to increase during this time. A person may experience flu-like symptoms such as nausea, vomiting, sweating, and stomach aches. Cravings and drug-seeking behavior still persist.
Symptoms have reached their peak at this stage. Individuals will typically experience body tremors, muscle spasms, diarrhea, insomnia, and increased blood pressure. Cravings are strongest during this period.
Acute symptoms are no longer present in this stage. However, individuals may have moodswings, cravings, drug dreams, anxiety, depression, irritability/agitation, insomnia, and poor concentration. A person is still highly susceptible to environmental triggers that may encourage them toward relapse.

Source: <https://www.addictioncenter.com/opiates/withdrawal-detox/>

“Hello!” from FRESNO AMERICAN INDIAN HEALTH PROJECT

By Amber Molina, LCSW

Director of Behavioral Health Services, Fresno American Indian Health Project

Fresno American Indian Health Project (FAIHP) is 1 of 9 Urban Indian Health Programs in California. FAIHP is a culturally sensitive health program aimed to enhance the health and wellness of American Indians and Alaska Natives in the city of Fresno.

FAIHP is a non-profit organization that is recognized by Indian Health Services as an Urban Indian Health Program under Title V of the Indian Health Care Improvement Act, PL-94-437. FAIHP is located in Fresno, CA, and serves a client population representing over 120 Tribes who currently reside in Fresno County. FAIHP is a culturally sensitive, health access, and advocacy program designed to enhance the health and well-being of the local American Indian and Alaska Native community. Standing as one of the longest lasting Native agencies locally, FAIHP continuously identifies and meets community need, which often include prevention and intervention services, mental health, medical services, and other health and wellness services.

Services related to substance use continue to be a need. Based on the impact of this epidemic in our local Native community, FAIHP has made strides in targeting this issue through culturally-focused prevention and education. FAIHP received a Tribal Medication Assisted Treatment (TMAT) grant through California Consortium for Urban Indian Health (CCUIH). Prior to this, FAIHP only assisted community members with referrals and linkage to services for any opioid use disorder treatment. Presently, we now provide direct training and education on opioid use. As a result, all FAIHP employees are trained in the use of Narcan and are available to administer if needed. Additionally, employees from other local agencies, including Owens Valley Career Development Center and Fresno Mental Health Services have also been trained.

FAIHP participates in many opportunities for community outreach. Information is consistently disseminated to community members at various meetings, presentations, and outreach booths. Substance use specific prevention strategies that FAIHP provides include: a weekly wellbriety group, off-site therapy services at the Sierra Tribal Consortium – Turtle Lodge Treatment and Recovery Center, White Bison Medicine Wheel and 12 Steps program, and the Clubhouse Youth Program that offers substance use education for teens.

Culture is the foundation of all services at FAIHP. Through this method, forms of prevention, intervention, and healing are created. We will continue to address community needs and promote a culture of wellness in order to heal and strengthen our community.

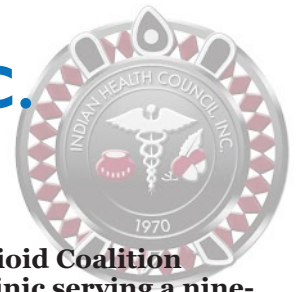


For more information, contact:
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INDIAN HEALTH COUNCIL, INC.

TRIBAL LOCAL OPIOID COALITION

By Jillian Jetter, MPH



This article is based on an interview with Rick Romero, Tribal Local Opioid Coalition Coordinator at IHC. The Indian Health Council, Inc. (IHC) is a Tribal clinic serving a nine-Tribe consortium in Southern California.

IHC coordinates the Tribal Local Opioid Coalition, which is a group of volunteers from the community who meet monthly to discuss issues around opioid use. The coalition, which includes Tribal law enforcement, San Diego Drug Task Force members, and members of the community, hopes to break the stigma around opioid abuse and encourage community action around opioids. Rick Romero, the Tribal Local Opioid Coalition Coordinator at IHC, emphasizes the importance of culture when describing how to prevent opioid misuse. “The guidelines for success were already there. They just need to come and get it,” referring to traditional Native methods for maintaining a healthy mind and body such as the Sweat Lodge Ceremony, Drum Group, Talking Circle, and White Bison Recovery Programs.

“The guidelines for success were already there. They just need to come and get it...”

For those who are currently suffering from an Opioid Use Disorder, IHC is piloting a program that offers hope of relief. The Tribal Medication-Assisted Treatment program (also known as TMAT) offers ten spots for patients struggling with Opioid Use Disorder to receive Buprenorphine, an FDA approved medication to reduce

cravings. Patients in this pilot program are assigned a care team of both medical and behavioral health staff to tailor the treatment to their unique needs, which include therapy and counseling to treat Opioid Use Disorder in addition to their medical treatment.

Additionally, IHC is offering ways to prevent future addictions through programs that can help manage pain without the use of prescription medications.

Community members can access Yoga and Tai Chi classes, a sweat lodge, and meet with a nutritionist. Through the Tribal Practices for Wellness In Indian Country (TPWIIC), a 3-year program funded by the Centers for Disease Control and Prevention, IHC is able to support Tribal practices that promote health and wellness, such as emphasizing the use of healthy traditional foods.

With various branches, departments, and a highly skilled and diverse staff, IHC is setting an excellent example of how to address the opioid crisis via both prevention and treatment.



SUMMER RESEARCH ASSISTANT PROGRAM

Each summer, CTEC recruits college students and recent graduates as Summer Research Assistants (SRAs) in the Summer Research Assistant Program (SRAP). Indian Health Programs are invited to serve as host sites and provide short-term public health research work for each SRA. In this program, CTEC team members serve as mentors, monitoring program progress, providing necessary guidance and training to ensure SRAs accomplish their summer project goals. Summer 2019 was the fourth year of SRAP with seven SRAs: CTEC's largest cohort to date! Notably, this was the first year for CRIHB to host a SRA to conduct public health research for CTEC.



Kathleen Beltran (Pomo) is an undergraduate at University of California, Davis, majoring in Anthropology.

My experience during the SRAP was enriching. I was placed at Lake County Tribal Health Consortium, Inc. (LCTHC), where my main objective was to create a database via Excel for the Diabetes Wellness Program. I was able to implement my skills

with data-entry and Excel to a real-world work environment! The data from one of the programs was then used for analysis. It was rewarding to use my past research experience to create a dataset that could be used for analysis, share results, answer questions, and improve programs to better suit patients' needs. When not entering data, I helped prepare food for Diabetes Wellness and Prevention workshops and meetings. This was very enjoyable. As an individual who emphasizes health in her life, I was happy to see that all meals prepared were vegetarian and vegan. I also attended the weekly garden class. After finishing the database, I then wrote a grant on the behalf of LCTHC. It was amazing to gain grant writing experience in addition to the other projects

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Jessica McCool (Tribal member of Santa Ynez Band of Chumash Indians), a recent B.A. in Sociology graduate from Chapman University.

I have been going to the Santa Ynez Tribal Health Clinic my whole life. SRAP gave me the opportunity to see 'backstage' of everything that goes on in the public health sphere on my reservation and helped me develop a deeper relationship with my community. I worked in the Behavioral Health Department at the clinic. I attended two opioid trainings at CRIHB and was trained to work on a Community Readiness Assessment for Opioid Use Disorder. Much of my time was spent conducting interviews, taking notes, transcribing, and analyzing/coding the results. After we completed the Community Readiness Assessment, we gave a score on various dimensions in the model. Based on the score, we were able to adequately create a Tribal Action Plan to raise the score before conducting the next assessment. Personally, I loved being part of this project, specifically because I was able to utilize and apply my skills from school. Also, I have seen this issue impact families on my reservation for a long time. I am proud that we are finally destigmatizing this behavior and speaking out about it!

Through the clinic's Native Connections grant, I conducted outreach for events. I facilitated focus groups to obtain community feedback to increase participation and facilitated the Youth

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Cynthia Begay (Hopi/Navajo) is a doctoral candidate at the University of Southern California Keck School of Medicine. She currently sits on the CTEC Advisory Council as a Technical Representative.

This program, hosted by United American Indian Involvement (UAI) under the direction of Dr. Andrea

Garcia, gave me the opportunity to delve deeper into a potential dissertation topic for my Ph.D. program while making progress with the Los Angeles City/County Native American Indian Commission (LANAIC) homelessness initiative. As a newly elected commissioner for LANAIC, SRAP gave me the opportunity to work with LA County executive directors from several different sectors, meet with a few LA County board supervisors, and draft a board resolution projected to be released early Fall 2019. In addition, I learned how people experiencing homelessness are counted, the systems in place, and how these systems work against our AIAN community in LA County. I learned different ways to communicate the needs of our community to city/county officials and

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Back row from left to right: Zachary Roberts, Eugene Kwon, Kelley Milligan, Kathleen Beltran, Leann Cornelius, Jessica McCool. Front row from left to right: Mai Der Lee, Teyah Lopez, Tiffany Ta, Cynthia Begay, Zoilyn Gomez, Yeoun-Jee Rengnez, Elaina Gueyger.



Zachary Roberts is a recent M.S. Social Work graduate from Humboldt State University.

Partnering with United Indian Health Services in Arcata, CA, was a rich experience. It was both challenging and rewarding. As a recent graduate, SRAP afforded me the opportunity to implement much new training, including developing community engagement, project planning and implementation, data analysis, creation and delivery of presentations, advocacy, and report writing. I honed my skills with Microsoft Office Excel, NextGen EMR, and IBM SPSS statistical analysis program. I have gained a better understanding of some of the specific challenges facing these rural communities along with witnessing many of their strengths.

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Elaina Gueyger (Apache) is an undergraduate at Humboldt State University, majoring in Social Work.

During my time with CTEC as a research assistant, I worked on three dynamic projects: Enhanced Community Health Profiles (ECHP), Tribal Youth Risk Behavior Survey (YRBS), and an information brief on opioid abuse. I had the opportunity to conduct qualitative research through the ECHP project. I was able to conduct focus groups, key informant interviews, and obtain patient success stories at several Indian Health Programs participating in the project. Having a background in social work, I shared my knowledge in behavioral health to aid in the formatting and display of data for the YRBS draft report. Also, working directly with CTEC gave me the

Continued on page 10



Teyah Lopez (Wailaki) is an undergraduate at UC Santa Barbara, majoring in Biology.

I worked as a Summer Research Assistant for the California Consortium for Urban Indian Health (CCUIH), a co-host site for the Sacramento Native American Health Center. I was assigned duties for projects related to the Red Women Rising program, Tribal Medication Assisted Treatment (MAT) program, and collaborated with the California Pan-Ethnic Health Network (CPEHN) on a Health Equity System Transformation (HEST) focus group.

For the Red Women Rising Program, I developed a compendium along with relevant laws and policies impacting domestic violence in AIAN communities. I gathered data on the prevalence of domestic violence and how certain laws, such as Public Law 280, affect the rates. The compendium included

Continued on page 10



Mai Der Lee is an undergraduate at CSU Fresno, majoring in Health Science.

I would like to thank CTEC and CRIHB for the amazing program this summer. I would also like to thank everyone at Round Valley Indian Health Center (RVIHC) for the wonderful opportunity and hospitality during my time as a research assistant. During my time at RVIHC, I was able to assist in conducting a community health assessment, develop PowerPoints to present to the board, and develop a survey for RVIHC staff via Survey Monkey. I have learned a lot about promoting health to the Round Valley community. Additionally, I attended their Diabetes Education Empowerment Program (DEEP) that teaches the effects of diabetes on the entire body. I assisted with the Youth Camp by helping the youth during their Rite of Passage

Continued on page 11

SUMMER RESEARCH ASSISTANT PROGRAM

Continued from page 8 - Kathleen Beltran
that I worked on.

I greatly appreciated working in a setting where the Public Health and Medical Departments work closely together to develop the best quality patient care. What I benefited most from this program was gaining experience in the public health field, being directly involved in a research project, and working at a clinic that served a large American Indian population. As an American Indian student, I was happy to be placed in a location where my maternal and paternal Tribes are from and at a clinic where my maternal Tribe has a partnership with. While I knew of the demographics in the area, this experience helped me understand the struggles individuals face in this rural area on a deeper level. I am confident that I will use my newly acquired skills and experiences as I continue my undergraduate, graduate, and onto my professional career.

I am very appreciative towards CTEC and CRIHB for this opportunity and the support that I was given. I am also very thankful to my supervisor and mentors at LCTHC. It was wonderful working with them, and I am so grateful for their warm welcome, trust, support, and mentorship.



Continued from page 9 - Teyah Lopez
Federal statutes, California statutes, and Tribal Ordinances.

For the Tribal MAT program, I assisted our Tribal MAT champions with Narcan trainings, putting together swag bags, and creating flyers about opioid use. When CCUIH collaborated with CPEHN for the HEST focus group, I created a flyer to recruit participants and took notes during the focus group. Afterwards, I analyzed the data and wrote a report on the main findings.

I am grateful to have been able to learn from everyone at CTEC and CCUIH. Working as a Summer Research Assistant has opened my eyes to other interests I can pursue in my future work. It was a great experience that I will never forget.

Continued from page 9 - Elaina Gueyger
opportunity to write on the topic of opioid addiction for the CTEC newsletter. This gave me the opportunity to learn about the impact of opioids in California Tribal communities. I am grateful to have been part of SRAP and thank my mentors, Kelley and Alma, as well as the rest of CTEC and CRIHB, for their guidance and support!



Continued from page 8 - Cynthia Begay
how to strategically plan within the city/county infrastructure.

The first half of SRAP was organizing and analyzing emerging themes from key informant interviews from ten AIANs who were currently experiencing homelessness. Our goal was to tie both the manuscript and board resolution together. It was great to see how Dr. Garcia was able to bridge her work within the county and the commission's initiative. Our future work will include: completing the manuscript, planning community events on community organizing, further developing our board resolution, and having a supervisor co-author the board resolution.

Thank you for the support this summer. Because of SRAP, I anticipate applying for a grant to better understand alcohol substance use disorder among AIAN experiencing homelessness that, in turn, will inform my dissertation research. I would recommend SRAP to students, especially to AIAN students, exploring the world of public health research and how it relates to our community.

Continued from page 9 - Mai Der Lee

ceremony. I took photos and video of the event that will later be used in a digital storytelling project. Engaging with the youth taught me a lot about their culture and traditions; I learned beading and made a necklace out of dentalium. Afterwards, I gave it to an elder in the community as a gift.

My internship wouldn't have been complete without my host-site supervisors, Julia Russ (RVIHC Native Connections Evaluator) and Vicki Shively (RVIHC Outreach Director). Both helped guide me on how to approach the community regarding their health. This program has opened my eyes to furthering my education, that there is much to learn of other communities, and how we can help others be socially, mentally, physically, and spiritually healthy.



BIG THANKS TO:



UNITED
AMERICAN
INDIAN
INVOLVEMENT, INC.



FOR HOSTING OUR SUMMER RESEARCH ASSISTANTS!

Continued from page 9 - Zachary Roberts

To balance my time spent entering data in the office, my host site supervisor, Dr. Martinez, emphasized and encouraged days out in the community. I joined community outreach workers in making house calls and wellness checks with more vulnerable patients. One house call was to a place the locals call, "the end of the road." It is literally the point at which the road stops upriver along the north bank of Klamath River on the Yurok Reservation. Residents here must travel two hours one way over dirt roads plus one-lane roads and county highways to get to their appointments.

I also had the opportunity spend a day transporting an elder to her appointment. It was great to see the health outreach worker's purpose was more than just getting the patient from point A to point B. These days out the field gave a clearer picture of the community represented in the data. I would recommend this experience to anyone interested in working in public health, social work, public advocacy, or wanting to serve and partner with American Indian and Alaska Native communities.

Continued from page 8 - Jessica McCool

Council meetings. I collaborated with the council in hosting events and programs in the community. Being part of investing and influencing the youth in my community is, to me, an important aspect in building and strengthening the longevity of a community. By creating stronger intergenerational bonds and interdepartmental connections, we are able to become a more cohesive Tribe.

Throughout this program, not only did I apply my knowledge but also learned more about my community. It gave me a deeper sense of pride with this research assistantship. I became aware of all of the efforts by the Behavioral Health Department and have a newly found passion for mental and public health in general. I was very fortunate to be part of this program and hope that it continues for years to come. It is a unique opportunity for American Indian and Alaska Native students and graduates to give back to their communities.

CTEC *in* ACTION

TRIBAL ADVERSE CHILDHOOD EXPERIENCES PROJECT

Adverse Childhood Experiences (ACEs) are potentially traumatic events that can have negative, lasting effects on health and well-being. These experiences range from physical, emotional, or sexual abuse to parental divorce or the incarceration of a parent or guardian. Slated for 2020, CTEC will partner with three tribal communities and clinics to examine resiliency, resources, strengths, and connectedness within their communities.



ANNUAL TRIBAL HEALTH PROGRAM (THP)/URBAN INDIAN HEALTH PROGRAM (UIHP) HEALTH PRIORITIES SURVEY - YEAR 2

CTEC administers an annual THP/UIHP Health Priorities Survey to THP/UIHP directors to gather information on the health priorities of the communities they serve to determine health issues that are most important to them.



ACORNs, CITE, AND GHWIC EVALUATION

Good Health and Wellness in Indian Country (GHWIC) is a Centers for Disease Control and Prevention funded project to assist with improving the health among American Indians and Alaska Natives (AIANs) in California. For GHWIC Year 5, CTEC hosted regional

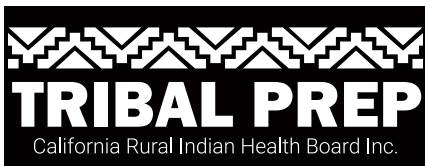
trainings to build capacity on epidemiologic and program evaluation for AIAN communities in California. CTEC has conducted a comprehensive evaluation of the Advancing California Opportunities to Renew Native health Systems (ACORNs) and California Indian Tobacco Education (CITE) programs. In addition, CTEC has provided on-going technical assistance/training to help Tribal communities increase Tribal capacity and program impact.

BUILDING PUBLIC HEALTH INFRASTRUCTURE: COMMUNITY HEALTH ASSESSMENT (CHA)

A community health assessment (CHA), also known as a community health needs assessment (CHNA), is being conducted in three communities across the state. CTEC is assisting three Indian health clinics, through CHAs, in identifying key health needs and issues through comprehensive data collection and analysis.

ENHANCED COMMUNITY HEALTH PROFILE (ECHP)

Through supplemental funding from the Centers for Disease Control (CDC), CTEC staff have collected qualitative data from focus groups, photo voice, key informant interviews, and patient success stories at 18 Tribal Health Programs and Urban Indian Health Programs. The data is currently being analyzed and will be included as part of the upcoming 2020 Community Health Profiles.



TRIBAL PREP EVALUATION

The Family and Youth Service Bureau has provided CTEC with five years of funding to evaluate CRIHB's teen pregnancy prevention program: Tribal Personal Responsibility Education Program (Tribal

PREP). Currently in its third year of funding, a CTEC program evaluator provides evaluation services and technical assistance to ten participating Tribal PREP partners.

METHAMPHETAMINE SUICIDE PREVENTION INITIATIVE (MSPI)/DOMESTIC VIOLENCE PREVENTION INITIATIVE (DVPI) EVALUATION TECHNICAL ASSISTANCE

Through IHS funding, evaluation technical assistance is provided for 12 MSPI and 12 DVPI grantees across the state, helping measure and share the impact of work being done in over 50 tribal communities specific to substance abuse, suicide, and domestic violence.

ORAL HEALTH SURVEILLANCE

The CDC provided a one-year supplemental funding to CTEC to conduct oral health surveillance. For this project, CTEC conducted an oral health needs assessment through dental directors at Indian Health Programs to gather information on oral health needs, gaps, capacity, and concerns for American Indians and Alaska Natives in California.

NATIVE CONNECTIONS EVALUATION

Through a five-year grant from the Substance Abuse and Mental Health Service Administration (SAMHSA), a CTEC evaluator has supported CRIHB's Native Connections grant by assisting eight Tribes and Tribal Health Programs understand their resources, capability, capacity, and readiness to respond to substance use disorders and other mental health issues.



PROJECT PATHWAY EVALUATION

Through SAMHSA funding, CTEC is in the fifth and final year of helping California Tribal communities incorporate the Community PROMISE intervention of recruiting community members to share their stories as they relate to substance use disorders, HIV, and/or hepatitis C.

UCLA CALIFORNIA HEALTH INTERVIEW SURVEY (CHIS) AIAN OVERSAMPLE

With the help of CTEC, UCLA conducted an oversample of American Indians and Alaska Natives in their annual California Health Interview Survey to provide a more accurate representation of American Indians and Alaska Natives in the data. In October 2019, UCLA CHIS staff produced analysis files for CTEC and public-use files for dissemination.

TRIBAL BEHAVIORAL RISK FACTOR SURVEILLANCE SURVEY (BRFSS) AND YOUTH RISK BEHAVIOR SURVEY (YRBS)

The Tribal BRFSS and YRBS data collection was completed in December 2018, and the results are currently being analyzed and developed into a report. The report will provide the CA Tribal community findings of health risk and health-related behaviors specific to adults and youth on topics specific to physical, emotional, mental, and spiritual health.

BUILDING PUBLIC HEALTH INFRASTRUCTURE: OPIOID SUPPLEMENT

An opioid data linkage pilot is investigating the rate of misclassification of opioid overdose rates within the California Department of Public Health's vital statistics data to identify the true impact of the opioid epidemic in two Tribal Health Programs.

TRIBAL PUBLIC HEALTH CAPACITY-BUILDING AND QUALITY IMPROVEMENT UMBRELLA: OPIOID

Through a series of 11 youth and elder focus groups and 15 key informant interviews in 17 California Tribal communities, CTEC has gathered community input for a strategic plan currently in development that will work to combat the impact of opioid misuse in the community through an emphasis on childhood resiliency.

For more information, contact us:

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CTEC'S LATEST RECRUITS *Welcome to the Team!*



Arunaranjani "Aruna" Arthanari has worked in the field of public health since 2008, focusing primarily on infectious disease epidemiology. In her native country, India, Aruna received a Bachelor's of Veterinary Medicine (BVSc) from Tamil Nadu Veterinary and Animal Sciences University. She then received a Master's in Preventative Veterinary Medicine (MPVM) at UC Davis. Aruna joined CTEC in March 2019 as an Epidemiologist.

Farheen Faruk is originally from Sacramento, California. Farheen moved to Southern California for several years, where she received a Bachelor of Arts degree in Psychology from the University of Redlands. She then received a Master of Science in Epidemiology from the University of California (UC) Irvine School of Medicine. She gained two years of public health experience through planning and implementing the National Institutes of Health's All of Us Precision Medicine Initiative in California. She also conducted data analysis and participant recruitment and education at the UC Irvine Institute for Memory Impairments and Neurological Disorders (MIND). Farheen joined the CTEC team in October 2019 as a Program Evaluator.

MEET THE TEAM!



**Gerardo
"Jerry"
Ramirez** is originally from Los Angeles and has lived in Northern California

for 10 years. Previously, he has worked with families in Yolo County as a prenatal health educator, patient advocate, and family support worker. He has also worked as a paraeducator and substitute teacher for the Vacaville Unified School District. In 2018 he received his Master of Public Health (MPH) and Master of Science in Behavioral Health from the University of San Francisco. In January 2019, he joined CRIHB as a Health Education Specialist working with the Tribal MAT program. Gerardo joined CTEC in October 2019 as a Program Evaluator.

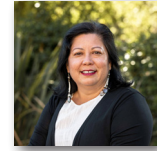


**Leann
Cornelius** is originally from Upstate New York but has previously lived in California.

Leann has also lived in Maryland, and Kentucky. Before returning to California, she obtained 3 years of professional experience as an epidemiologist, working primarily in the area of tobacco cessation. She received a B.S. in Biology and Environmental Studies from Hobart and William Smith Colleges, as well as an M.S. in Epidemiology from the State University of New York (SUNY), University at Buffalo. Leann joined the CTEC team in February 2019 as an Epidemiologist.



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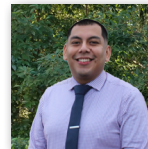
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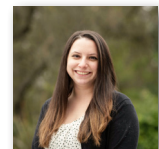
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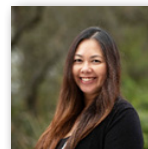
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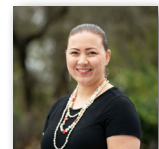
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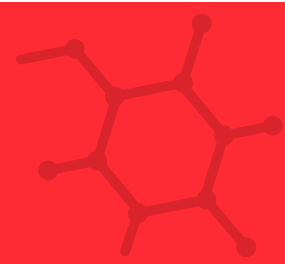
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CTEC NEWSLETTER FALL 2019



One of twelve Tribal Epidemiology Centers in the United States, the California Tribal Epidemiology Center (CTEC) was established in 2005 and is housed within the California Rural Indian Health Board, Inc. CTEC aims to assist in collecting and interpreting health information for all American Indians and Alaska Natives in California. CTEC works directly with Tribes and Indian Health Programs (rural and urban) to provide technical assistance and epidemiological support.

Narcan 101 Need to Know



What is Narcan and how does it work?

What is Narcan?

Narcan (Naloxone) is a nasal spray administered to reverse an opioid overdose.



Source: www.schoolhealth.com



How does it work?

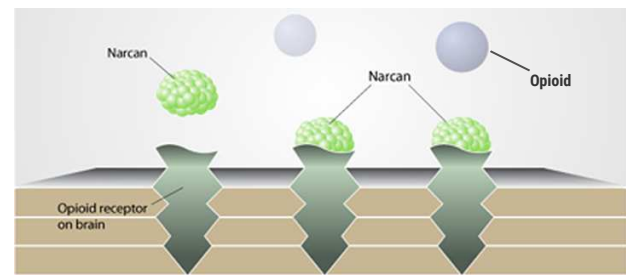
- Narcan only works if opioids are present in the system.
- Once administered it takes 3-5 minutes to "kick in".

What happens to the body?

- During an overdose, opioid receptors in the brain are activated.
- Breathing is repressed as a result from the opioids.
- The brain then floods with dopamine resulting from the opioids.
- Dopamine produces an euphoric effect.

When Narcan is administered...

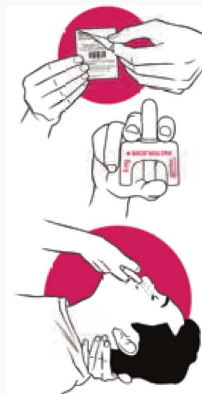
- Narcan removes the opioid from its receptor, binds to the receptor, and prevents the opioid from binding to it again (Illustrated in figure above).
- When opioids cannot bind to the receptors, the brain does not flood with dopamine.
- This temporarily reverses an overdose (30-90 min).



Source: minnyapple.com

Important

- A person may need multiple doses of Narcan; depending on their weight, the dose of the opioid in their system, and whether there were mixed drugs involved in the overdose.
- If the victim does not respond to the first dose of Narcan within 3 minutes, administer the second dose in the opposite nostril.



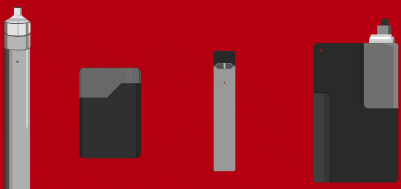
Source: www.narcan.com

Need to Know

- Narcan has no adverse effects.
- If Narcan is administered without the presence of opioids, it will not help BUT it will also not harm the victim.
- Store Narcan in secure, safe place at room temperature. Do not refrigerate.

VAPING WARNING

WHAT ARE ELECTRONIC CIGARETTES?



Electronic cigarettes also known as vapes, e-cigs, pens, mods, are devices used to heat liquids into vapor which users inhale into their lungs.¹

Liquids can contain: nicotine, tetrahydrocannabinol (**THC**) and cannabinoid (**CBD**) oils, and other substances. **THC** is the psychoactive mind-altering compound in marijuana.¹

RECENT OUTBREAK INFORMATION:

As of November 5, 2019, 2,051 cases of e-cigarette, or vaping, product use associated lung injury have been reported to the CDC by 49 states (all except Alaska), the District of Columbia, and 1 U.S. Territory.

AMONG 1,358 PATIENTS WITH DATA ON AGE AND SEX¹



39 Deaths have been confirmed in 24 states



70% of patients of total patients are male



Most patients reported using THC products obtained from informal sources like friends, family, or dealers



New lab testing of biologic samples from patients with these injuries identified vitamin E acetate, an additive in some THC-containing products

1. "Outbreak of Lung Injury Associated with E-Cigarette Use, or Vaping." Centers for Disease Control and Prevention, Accessed: 8 Nov 2019, https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html.

RECENT OUTBREAK INFORMATION cont'd: ¹

24 Years is the median age of patients



79% of patients are under 35 years old

Among 849 patients with data on substance usage for the past three months: ¹

UPDATED October 15, 2019

Reported using
THC-containing
products

78%

31%

Reported using
only THC-containing
products



Reported using
nicotine-containing
products

58%

10%

Reported
using **only nicotine-**
containing products

RECOMMENDATIONS: ¹

- Do not use e-cigarette, or vaping, products that contain THC.
- Do not buy any type of e-cigarette, or vaping, products particularly those containing THC, off the street.
- E-cigarette, or vaping, products should never be used by youth, young adults, or women who are pregnant
- If you continue to use e-cigarette, or vaping, products carefully monitor yourself for symptoms and see a health care provider immediately if you experience the **following symptom(s)**:
 - Cough, shortness of breath, or chest pain
 - Nausea, vomiting, abdominal pain, or diarrhea
 - Fever, chills, or weight loss