

RIVERSIDE SAN BERNARDINO COUNTY INDIAN HEALTH INC.

EMERGENCY OPERATIONS PLAN FOR WATERBORNE ILLNESSES

San Bernardino, California GPH 5995 - 001, June 2023



























TABLE OF CONTENTS

| PREFACE | |
|---|-------|
| Waterborne Illnesses Among Health Clinics in Southern California | PG 3 |
| Waterborne Illnesses Background | PG 3 |
| SIGNATURE PAGE | PG 4 |
| BASEPLAN | |
| Mission Statement | PG 5 |
| Statement of Purpose | PG 5 |
| Authorities and their Public Health Functions | PG 5 |
| Definitions | PG 5 |
| Communication Plans | PG 6 |
| Methods of Communication | PG 7 |
| Mutual Aid Agreement | PG 7 |
| CONOPS | |
| Situational Awareness for Native Americans in San Bernardino County | PG 8 |
| Matching Available Resources to the Needs | PG 9 |
| Evaluating the Effectiveness of Emergency Response | PG 10 |
| ANNEX 1: THIRA | PG 12 |
| ANNEX 2: TRAINING SEMINAR | PG 13 |
| REFERENCES | |
| Base Plan References | PG 15 |
| CONOPS References | PG 16 |

PREFACE

Waterborne Illnesses Among Health Clinics in Southern California

The plan focuses on health clinics that serve to Native American populations within Southern California. The plan is specifically focused on waterborne illnesses among Indian health clinics within Southern California as this is a poorly addressed prevalent public health concern among the Native American community. Additionally, waterborne illnesses are also an important public health concern across the United States. California has a large Native American population compared to other Western states and Southern California has a greater population of Native Americans compared to Northern California (such as the San Francisco, Fresno, Sacramento, and Modesto surrounding areas).

According to the National Risk Index Assessment, San Bernardino County has a risk index score of 99.9, one of the highest in the State of California. In addition to the high risk score, the expected annual loss due to disasters in the County is significant in the coming year, regardless of type. Regarding waterborne illnesses, alone, the California Department of Public Health (CDPH) reported that Southern California has a higher prevalence of waterborne pathogen cases than the average of California. For example, from 2013-2019, Los Angeles County in Southern California, had the highest rate of Legionellosis (Legionella) in the whole State at about 2 per 100,000 people. The average being 1 in 100,000 people in the State. Southern California accounts for approximately 73% of all Legionellosis cases in the State. ¹⁹ Irregular regulation of water supply is the main concern for waterborne pathogens like Legionellosis, as this type of bacterium can propagate readily in poor conditions.

Waterborne Illnesses Background

Waterborne illnesses are derived from contaminated water through chemicals, toxins, or transmissible pathogens. Individuals may become affected by the water if ingested, inhaled, and/or if transmitted through the eyes, ears, skin, or other mucous membranes among the human body. Waterborne illnesses can lead to severe or mild cases of contamination as well as death if left untreated. It's important to seek treatment immediately as waterborne illnesses may also lead to additional and long-term health problems within the respiratory system, neurological system, immune system, or within the integumentary system. Once a medical professional has detected an individual with a waterborne illness, it is important for additional medical employees and public health employees to track the source, keep track of collected patient data, and to respond right away to an illness outbreak in order to prevent additional waterborne illnesses among affected communities.

SIGNATURE PAGE

The undersigned have reviewed, approved in full, and will support implementation of the following: Waterborne Illness response in Riverside and San Bernardino County.

| Executive Leadership Team: |
|---|
| Bill Thomsen, Chief Executive Officer |
| Mo Zayed, Chief Financial Officer |
| Anthony Mazza, Chief Operations Officer |
| Dr. Philip Farabaugh, Clinical Services Director |
| Standing Information Technology Director |
| Riverside - San Bernardino County Board of Directors Team: |
| Sherri Salgado, Board President (represents Cahuilla Band of Indians) |
| Teresa Sanchez Board Delegate Vice President (represents Morongo Band of Indians) |

BASEPLAN

Mission Statement

The mission of Riverside San Bernardino County Indian Health Inc. (RSBCIHI) Clinic is to provide culturally sensitive healthcare, respect and abide by traditional customs of our indian communities, and promote wellness and provide early intervention to achieve healthy lifestyles.

Statement of Purpose

The purpose of this plan is to ensure that the Riverside San Bernardino County Indian Health clinic is prepared in the event of an epidemic of a waterborne illness through contaminated drinking water.

Authorities and their Public Health Functions

- 1. **The San Bernardino County Emergency Management Team** is managed through the police department. They are responsible for implementing mitigation, preparedness, response, and recovery during emergencies (1).
- 2. **San Bernardino Office of Emergency Services** provides leadership and guidance of countywide emergency management to ensure protection during and after disasters (2).
- 3. California Emergency Management Agency assists local governments in dealing with disasters natural or man-made that are too large for the local government to manage independently through planning, preparation, response, and recovery efforts (4).
- 4. **San Bernardino County Department of Public Health** works to prevent epidemics, protect against environmental hazards, prevent injuries, respond to disasters and assist communities in recovery (3).
- 5. **California Department of Public Health** protects and aids in infectious disease control and prevention, food safety, environmental health, emergency preparedness, health promotion, and health equity (5).
- 6. **San Bernardino County Environmental Health Services** works to prevent epidemics and the spread of disease by enforcing laws and regulations regarding safe drinking water, food protection, vector control, waste management, and emergency response. Additionally, they respond to disasters and assist in communities in recovery (6).

Definitions

Amebiasis: An intestinal (bowel) illness caused by a microscopic parasite named, *Entamoeba histolytica*, which is spread through human feces.¹²

Emergency Response Plan: A set of steps to stabilize a potentially dangerous condition including who to contact, how to act, resources to use.¹⁴

Epidemic: Affecting or tending to affect a disproportionately large number of individuals within a population, community, or region at the same time.¹⁸

Giardiasis: An intestinal (bowel) illness caused by a microscopic parasite called Giardia. It is a common illness that causes diarrhea (loose stool/poop).¹²

Legionellosis: A serious type of pneumonia caused by Legionella bacteria. People can get sick when they breathe in small droplets of water or accidently swallow water containing Legionella into the lungs.¹⁵

Pathogen: Something (such as a type of bacteria or a virus) that causes disease. 13

Tribal Sovereignty: The right of American Indians and Alaska Natives to govern themselves. The U.S. Constitution recognizes Indian tribes as distinct governments and they have, with a few exceptions, the same powers as federal and state governments to regulate their internal affairs. Sovereignty for tribes includes the right to establish their own form of government, determine membership requirements, enact legislation and establish law enforcement and court systems.¹⁶

Unincorporated (Insular) Territory: A self-governing country which is, however, dependent on the absolute power of the US Congress, as well as the US armed forces exercise extensive control over it.¹⁷

Waterborne Disease Outbreak: An incident in which two or more persons experience a similar illness after having contact with the same source of drinking or recreational water.

Waterborne Illness: An illness due to infection with bacteria contaminating the water supply.

Communication Plans

Water contamination is, unfortunately, common in California; especially in populations of unincorporated and rural areas. The California State Water Resources Control Board (CSWRCS) is responsible for the monitoring and enforcement of untainted drinking water in the State. Despite continued adoption of regulations that are supposed to protect residents from contaminated drinking water, there are countless communities that are unable to trust the water coming from their faucets.

Insular communities suffer the most - some claiming that they have yet to receive infrastructural improvements for over a decade past legislative promises. Reports of microbial diseases like Legionalla, Giardia and Amoebic parasites are abundant in underfunded and underdeveloped areas, such as in unincorporated communities. These areas - often rural - do not receive the same support as State and Federally recognized ones, including infrastructurally and financially.

The Riverside-San Bernardino County Indian Health, Inc (RSBCIHI) is required to report if an outbreak of water supply illnesses is suspected. An outbreak is quantified as two or more people who experience the similar symptoms after contact with the same water source. RSBCIHI must report waterborne pathogen illness outbreaks to their local sanitation agency; the San Bernardino County Department of Public Health, Environmental Health Services, and Emergency Management Agency. In smaller rural communities - as one may find in the mountainous region of San Bernardino County - unregulated water sources act as breeding grounds for disease accumulation.

Methods of Communication

RSBCIHI has dedicated Patient Advocates who help Native American residents of the area to find programs and medical care that cater to their specific needs. With or without insurance, patients are evaluated by a physician who provides medical recommendations to the patient. And depending on the resources the patient does or does not have, they may be referred to Patient Services who will either be able to make a direct referral themselves or have them meet with a Patient Advocate if they require a more holistic level of care.

This clinic has ten locations in the Riverside-San Bernardino area, which makes it easier for caregivers in each location to access records for each patient. Therefore, when a single patient is identified with a communicable, waterborne illness, the other locations become aware and can compile patient reports for impending investigation by the Public Health Department of the county. The clinic must report a confirmed case of disease sometimes within 24 hours or seven days from a positive culture - depending on the disease. The timeline of the report may depend on several factors, including the age of the infected, questionable outbreak presence, and community water regulation enforcement.

Regarding suspicion of water contamination, the clinic makes an effort to refer patients to the appropriate County or State agencies that have resources to test their environment for the source(s). Due to innumerable reports of this condition in rural communities, water system consolidation has been a long-debated solution. However, it is expensive to implement and is often stalled due to bureaucratic barriers. Since medical providers are not mandated to report on singular cases, the lack of enforced accountability for this environmental concern is perpetuated.

Mutual Aid Agreement

Per the Los Angeles County Acute Communicable Disease Control Manual (ACDC), medical providers are required to report cases of waterborne illnesses in as little as 24 hours. The RSBCIHI is a non-profit, tribally owned healthcare consortium that abides by California medical and public health law, but has ownership in the specific treatment of its patients in the region. Specific treatment usually accounts for cultural, gender-norm, and socioeconomic sensitivity. Their system is supported by nine widely-recognized band-specific tribes of the region: Cahuilla, Mission, and Luiseno. Executive leadership and Board members work closely with the Bureau of Indian Affairs of the US Department of the Interior to expand their clinical practice to ensure they cover hard-to-reach populations across the Riverside-San Bernardino territory. This partnership considers the environmental versus public health impact of expansion on County land.

CONOPS

Situational Awareness for Native Americans in San Bernardino County

The San Bernardino County Department of Public Health and Environmental Health Services acknowledges that *cryptosporidiosis* (Crypto) and *Escherichia coli* (E. coli) are the most commonly found waterborne illnesses. Crypto is a parasite that can be found in drinking water and recreational water, such as swimming pools or poorly controlled wadding waters. Once ingested, it resides in the intestines of humans and other animals until it is excreted in a bowel movement. Coming into contact with infected feces, sewage or contaminated water are serious risk factors in San Bernardino.^{3,7} This county has a significant population size of Native Americans (NA) in comparison to the rest of the State at 2.2% or approximately 18,000 as of 2018. These populations predominantly live in unincorporated territories in mountainous and more rural regions.^{7,9}

Classically, Native Americans have some skepticism of their surroundings and of diseases due to their long traumatic history of colonialism and the illnesses that ensued as a result. In 2019, there were no documented cases of waterborne illnesses in the NA community in the county according to its 2018 Mortality and Morbidity Report. However, climate change and the lag in legislative enforcement poses a threat, despite this population's precautions. Some indicators that the environment and living conditions of their lands in San Bernardino are the water quality and level of pollution - 616.682 on the Drinking Water Contaminant Index and 30.89 of pollution burden, respectively - exceeding the State averages of 544.737 and 23.36, respectively. Coupled with the already increased status of poor health and poverty, NA have little leverage to get the San Bernardino Water Quality Control department to construct the changes they promised as bureaucratic entities have traditionally stalled improvements in disadvantaged areas, blaming lack of budget. San Bernardino budget.

In light of these increasingly turbulent circumstances, healthcare providers and city planners need to be prepared for one or more outbreaks of the aforementioned waterborne illnesses. The Riverside-San Bernardino County Indian Health, Inc healthcare group provides a wide range of services from both a clinical and sociodynamic standpoint. As dictated by the San Bernardino County Public Health Department, upon the suspicion of waterborne illness, confirmatory testing needs to happen before it is brought to the Division of Environmental Health Services (DEHS).⁷

Regarding Crypto and E. Coli, specifically, the following chain of action must happen:

- 1. If one patient complains of unexplained, persistent diarrhea causing severe dehydration, the provider must make every effort to rehydrate them and prescribe a hydration regimen until symptoms subside. Cases in healthy individuals have a good prognosis as long as fluids are maintained for the course of the infection. *In children under the age of five and expecting mothers, dehydration to this extent can be highly detrimental for themselves and others. As a precaution, most cases of suspected Crypto and E. Coli are required to provide repeated stool samples to be lab tested with the specification to test for this parasite, as it is not on a common panel.^{4,7,8}
- 2. Those that are ill are instructed to remain as quarantined as possible to contain further transmission.8
- 3. If a case is confirmed and especially if not improving physicians of the RSBCIHI clinics are required to submit a report online or in-person to the DEHS within 24 hours.
- 4. If more than one case is presented, the clinic must report a possible outbreak.^{3,4,7}
- 5. The clinics have Public Health Nurses and Patient Advocates who are equipped to help patients who suffer from long-term effects of the illness. If a patient gets well, they will

still encounter bowel abnormalities that may take time to resolve, for which special referrals or regimens may be provided by these services. This is especially critical for those that are immuno-compromised, have HIV and/or are at an otherwise vulnerable age.^{2,7}

NOTE: The level of upper-echelon leadership involvement will be proportionate to the scope of waterborne-disease emergency. The above outlines preliminary steps that would normally ensue in the discovery of a disease preceding declaration of a county-wide outbreak alert, which would require further coordination. **Please see below for plans in emergent conditions.

*Native Americans experience a disproportionately higher rate of teen pregnancy and sexually transmitted disease which puts them at further risk.

Matching Available Resources to the Needs

A waterborne-related illness is declared by the San Bernardino County Department of Public Health. Waterborne illnesses are easily communicable through person-to-person contact, contaminated food, and through contaminated water in buildings. **Waterborne illness outbreaks are initially communicated through the California Department of Public Health (CDPH) and later communicated through each county within California. A text-messaging system will be implemented within the Riverside-San Bernardino County Indian Health, Inc health care program. This communication system will enable all visitors, employees, and patients within San Bernardino county and Riverside county to remain updated on all current outbreaks and emergencies – in addition to waterborne-related illnesses.

The Chief Operations Officer and the Information Technology Director of the program will be responsible for the following implementation and for setting up the communication system. Additionally, a response team will be implemented for the health care program and the response team will be composed of all board of directors (tribal representatives) as necessary. The entrusted tribal representatives represent nine tribes across Riverside and San Bernardino and the following individuals have extensive knowledge of traditional medical practices, diverse health care topics, have extensive knowledge of their tribal care health interests, and each representative have medical and clinical experiences. All board of directors will be deployed from their respective clinics around Riverside and San Bernardino county. Board of directors may visit patients directly, within Southern California, that are in need may seek assistance should the patient be unable to visit a clinic under the health care program. Medical aid and assistance will be supported and funded by grants and partnership funding aid as each Director of the Board has an integral medical partnership (such as the Gathering of Good Minds Project, the Community Health Aide Program Tribal Advisory Group with the Indian Health Service, and more) that provides medical aid.

Waterborne illness caseloads that consist of less than 20 will be held at one of the 20 locations around Southern California to allow for patients to be treated safely and efficiently. Patients will then be advised to stay in their homes while a Director of the Board will provide daily check-up services and medications until healthy. This would prevent additional outbreaks and to allow for the board of directors to provide personable attention while enabling other clinicians to focus on providing additional medical and health services to other patients in need. Severe waterborne

illness cases will be evacuated to Canyon Ridge Hospital, Bear Valley Community Hospital, Barstow Community Hospital, Arrowhead Regional Medical Center, or Kaiser Permanente Fontana and Ontario Medical Centers. Furthermore, Patients with mild waterborne illness cases will be referred to Inland Urgent Care of Menifee, Inland Urgent Care of Wildomar, or Inland Urgent Care of Temecula. The Chief Operations Officer or the Clinical Services Director will be responsible for initiating referrals for severe and mild cases.

Evaluating the Effectiveness of Emergency Response

The Riverside San Bernardino County Indian health clinic will conduct an action review following the waterborne disease outbreak. This review will be conducted with local health departments to discuss communication processes, control measures, and the timeline that occurred throughout the outbreak. Following the action review, the effectiveness of the emergency plan will be assessed depending on how many cases were reported and how well the contamination was contained. Additionally, communication between health agencies and the public will be evaluated.

After evaluation, we will know if the emergency plan was effective if there was effective communication to the public through local media. Additionally, the plan will be deemed effective if the cases of the waterborne disease were contained within a quick manner. In an effort to minimize the impacts of a waterborne disease outbreak, Riverside San Bernardino County Indian Health Clinic will collaborate with the local health departments and surrounding tribal communities to create educational materials on prevention of waterborne disease outbreaks. Leaders within the tribal communities are trusted and will provide educational materials through community meetings.

| California | San Bernardino |
|------------------------------|---|
| | San Demardino |
| 17.9% | 22.5% |
| 9,163,900 | 553,200 |
| 18.2% | 23.5% |
| 2,941,300 | 182,100 |
| 12.1% | 13.4% |
| 29,684,900 | 1,573,700 |
| 38.9% | 42.3% |
| 29,684,900 | 1,573,700 |
| 41.332 | 45.382 |
| 39,283,500 | 2,149,000 |
| 544.737 | 616.682 |
| 39,283,500 | 2,149,000 |
| 13.3% | 16.7% (16.2% - 16.9%) |
| 23,461,300 | 1,295,700 |
| 22.4% | 28.5% |
| (21.0% - 23.7%) 6,223,600 | (28.1% - 28.9%) 278,100 |
| | 18.2% - 2,941,300 12.1% - 29,684,900 38.9% - 29,684,900 41.332 - 39,283,500 544.737 - 39,283,500 13.3% (12.5% - 14.0%) 23,461,300 22.4% (21.0% - 23.7%) |

| /12/23. | 10:23 | PM |
|---------|-------|----|

AskCHIS Neighborhood Edition - Local Level Health Data

| | State | Counties |
|---------------------------------------|--|---|
| | California | San Bernardino |
| Low-income food insecurity (18+) 2020 | 5.0% (4.7% - 5.3%) 29,684,900 | 9.6% (9.2% - 9.7%) 1,573,700 |
| Particulate matter (PM2.5) (0+) 2020 | 6.727 μg/m ³ - 39,283,500 | 6.605 μg/m ³ - 2,149,000 |
| Pollution burden (0+) 2020 | 23.36 - 39,283,500 | 30.859 - 2,149,000 |

ANNEX 1: THIRA

| Natural-caused Threats | Technological-caused Threats | Human-caused Threats |
|--|---|---|
| Highly Infectious Diseases (Giardia, Legionella, E.coli, diarrhea, typhoid fever, etc): maintain hand-washings (for 30 seconds), temperature checks, and refer to waterborne exposure questions (for staff members and patients) to maintain declining exposure to diseases. | Power Outages: Risk of disruption in medical equipment, and exams, communication systems/devices that immediately impact staff members and patients. Imperative to implement "stay-in-place" verbal announcement when safe. | Lack of Emergency supplies/equipment: Insufficient medical masks, patient masks, antibacterial items, medical gowns/hats, gloves, surgery/exam equipment, and prescriptions will significantly affect prospective patients and surrounding community. |
| Earthquakes: Due to the prevalence of earthquakes in southern California, relocation of staff members, clinicians, and patients may be needed once safe. | Transportation Accidents: Clinical vehicles (for medical supplies/patients) may experience vehicular malfunction or cross contamination. Result may be life threatening to prospective patients in immediate need and all passengers. | Biological warfare: Risk of potential threat to underserved communities due to hate crimes may serve as life-threatening (if there is insufficient security precautions). |
| Flooding (resulting in water contamination): A life-threatening event that may result in loss of life among staff members and/or patients, damaged infrastructure, and/or a lack of medical care access. Patients and staff members must immediately seek higher ground. | Pipeline Explosions: Possible explosion within underground water and gas pipes. Immediately impact medical equipment, clinic rooms, and ventilations. Immediate threat to patients and staff members. | Active Shooter Incident: Imperative to implement safety security measures, proper training among staff members, and implement emergency plan. High- risk threat with potential and substantial life loss. |

ANNEX 2: TRAINING SEMINAR

| RSBCIHI Water Pathogen Awareness Program | | |
|--|---|--|
| Objectives of your Training Seminar (What mitigation strategy are you advocating?) | Geographic Information Systems (GIS) and Electronic Health Records (EHR) to track waterborne pathogen reports and potential exposures in known Native American territories. | |
| Estimate Length of Training | Information Services Department (ISD) & Office of Emergency Management (OEM) staff - 2.5hrs RSBCIHI Tribe leaders & staff - 1hr | |
| Target Audience and max size of audience. | San Bernardino IDS managers Max. 3 people RSBCIHI Executive Leadership & medical staff Max. 50 people RSBCIHI sovereign Tribe leaders Max. 10 people OEM staff Max. 8-10 people | |
| Who would be a good candidate (e.g., structural engineer, health dept. official, first responder?) as Facilitator of this session? Why? | A Health Department official within Riverside county or San Bernardino county (an Environmental Health Manager or Director) who has extensive knowledge of Native American territories within Southern California. | |
| What do you want community members to do as a result of their attending this session? | Be aware of potential exposures of waterborne pathogens and know the signs and symptoms. Know proper sanitation methods to avoid waterborne illnesses such as frequent handwashing. Do not drink untreated water from pounds, lakes, or springs. Know how to disinfect water if there is an outbreak through boiling methods. Change the way they interact with water systems. Help prevent an outbreak by cooperating with public health workers. Participate in pre-suryey and post-survey about the Waterborne Illness Program. Surveys will be shared among attendees to understand knowledge of program. | |
| Strategies to increase community uptake of your mitigation (We have lots of useful links for checklists on the Course Home page under the Important Links page.) | *Provide virtual and in-person trainings to garner more attendees. Virtual and physical handouts will be provided as follows: 1. Provide Handouts on when and how to properly wash your hands. https://www.cdc.gov/healthywater/emergency/pdf/factsheet -wash-your-hands.pdf | |

List the ones you think might be useful (in the appropriate language) or provide a title or two of a list or handout that you think would be good to give out to attendees. 2. Provide Handouts on how to disinfect contaminated water if there is an advisory.

https://www.cdc.gov/healthywater/emergency/pdf/make-water-safe-during-emergency-p.pdf

3. Provide Handouts on how to prepare and store an emergency supply of clean water (for cooking, bathing, etc) if there is an advisory.

https://www.redcross.org/content/dam/redcross/atg/PDF_s/ Preparedness Disaster Recovery/Disaster Preparedne ss/Food Safety/Food and Water-English.revised 7-09.pdf

4. Provide Handouts on how to talk to and prepare children within the household in case of an emergency.

https://www.redcross.org/content/dam/redcross/atg/PDF_s/Preparedness__Disaster_Recovery/General_Preparedness__Recovery/Home/ARC_Family_Disaster_Plan_Template_r083012.pdf

Provide Handout on how to use 'HealthMaps' website to track waterborne illnesses within desired area (by state, city, zip code, etc).
 (https://healthmap.org/en/

Base Plan References

- Emergency Management. City of San Bernardino California Web site.
 https://www.sbcity.org/City_Hall/Police_Department/Emergency_Management.
 Accessed June 9, 2023.
- 2. Office of Emergency Services. San Bernardino County: San Bernardino County Fire Protection District Web site. https://sbcfire.org/oes/. Accessed June 9, 2023.
- 3. Working in partnership to promote and improve health. San Bernardino County: Public Health Web site. https://dph.sbcounty.gov/. Accessed June 9, 2023.
- 4. California Office of Emergency Services. AllGov California Website.

 http://www.allgov.com/usa/ca/departments/office-of-the-governor/california_emergency_manage

 ment agency?agencyid=217. Accessed June 9, 2023.
- About Us. California Department of Public Health Web site. https://www.cdph.ca.gov/Pages/About.aspx. Last updated May 19, 2023. Accessed June 9, 2023.
- 6. *About Us.* San Bernardino County: Environmental Health Services Web Site. https://ehs.sbcountv.gov/about-us/. Accessed June 9, 2023.
- About Waterborne Disease Outbreaks. Centers for Disease Control and Prevention Website. <u>About Waterborne Disease Outbreaks Waterborne Disease Outbreak Investigation</u> <u>Toolkit | CDC</u>. Last Updated December 1, 2022. Accessed June 22, 2023.
- 8. RSBCIHI Riverside San Bernardino County Indian Health. https://www.rsbcihi.org/
- Information for Public Drinking Water Systems | California State Water Resources Control Board.
 Ca.gov. Published 2019.
 - https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/publicwatersystems.html
- Boyd-Barrett C, May 5 CHR, 2021. "I'm Scared of Getting Sick From the Water." California Health Report. Published May 5, 2021. Accessed June 10, 2023. https://www.calhealthreport.org/2021/05/05/im-scared-of-getting-sick-from-the-water/
- 11. Department of Public Health Acute Communicable Disease Control. publichealth.lacounty.gov. http://publichealth.lacounty.gov/acd/Water.html
- 12. Communicable Disease Fact Sheets. Ny.gov. Published 2007. https://www.health.ny.gov/diseases/communicable/
- 13. Pathogen Definition & Meaning | Britannica Dictionary. www.britannica.com. Accessed June 25, 2023. https://www.britannica.com/dictionary/pathogen
- 14. What is an Emergency Response Plan. Asms-pro.com. Published 2019. https://www.asms-pro.com/SMS/WhatisanEmergencyResponsePlan.aspx
- 15. Legionnaires Disease and Pontiac Fever. Centers for Disease Control and Prevention. Published 2018. https://www.cdc.gov/legionella/index.html
- 16. An Issue of Sovereignty. www.ncsl.org. https://www.ncsl.org/quad-caucus/an-issue-of-sovereignty#:~:text=Tribal%20sovereignty%20refers%20to%20the
- 17. What is Unincorporated Territory | IGI Global. www.igi-global.com. https://www.igi-global.com/dictionary/decolonizing-guam-with-poetry/96184
- 18. Merriam-Webster. Definition of EPIDEMIC. Merriam-webster.com. Published 2019. https://www.merriam-webster.com/dictionary/epidemic
- 19. Epidemiologic Summaries of Selected Communicable Diseases in California. www.cdph.ca.gov. Accessed June 26, 2023.
 - https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/EpiSummariesofCDsCA.aspx

CONOPS References

- 1. UCLA Center for Health Policy Research. healthpolicy.ucla.edu. https://healthpolicy.ucla.edu/Pages/home.aspx
- 2. Community Outreach RSBCIHI. Accessed June 12, 2023. https://www.rsbcihi.org/about/00-community-outreach/
- Vanden Esschert KL, Mattioli MC, Hilborn ED, et al. Outbreaks Associated with Untreated Recreational Water — California, Maine, and Minnesota, 2018–2019. Morbidity and Mortality Weekly Report. 2020;69(25):781-783. doi:https://doi.org/10.15585/mmwr.mm6925a3
- 4. Epidemiologic Summary of Shiga Toxin-Producing Escherichia Coli (STEC) Infections and Hemolytic Uremic Syndrome (HUS) in California.; 2013. Accessed June 11, 2023. https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/STECHUSEpiSummary2013-2019.pdf
- Ensuring Safe Drinking Water for California's Native American Communities. Public Policy Institute of California. https://www.ppic.org/blog/ensuring-safe-drinking-water-for-californias-native-american-communities/
- 7. Environmental Health Services SBCounty Department of Public Health. Environmental Health Services. Accessed June 12, 2023. https://ehs.sbcounty.gov/
- 8. E. coli Diagnosis and treatment Mayo Clinic. www.mayoclinic.org.

 https://www.mayoclinic.org/diseases-conditions/e-coli/diagnosis-treatment/drc-20372064

 #:~:text=To%20diagnose%20illness%20caused%20by
- Place Rankings Data Commons. datacommons.org. Accessed June 13, 2023. https://datacommons.org/ranking/Count_Person_AmericanIndianOrAlaskaNativeAlone/Countv/geold/06?h=geold%2F06071
- 2018 Annual Morbidity Report. Accessed June 13, 2023. https://wp.sbcounty.gov/dph/wp-content/uploads/sites/7/2020/11/2018-CDS-Annual-Morbidity-Report.pdf

Authors: Katriel Bush, Kristen Smith, Catrina Turk