Summary Report
CDC AR-3 Field Team

COVID-19 among Hispanic and Marshallese communities in Benton and Washington Counties, Arkansas

Centers for Disease Control and Prevention

Washington and Benton Counties, Arkansas

June 13 – July 4, 2020

For more information: **www.cdc.gov/COVID19**

TABLE OF CONTENTS

Executive Summary

The Arkansas Department of Health (ADH) requested technical assistance from CDC to characterize the patterns of COVID-19 spread in the communities of Benton and Washington counties in Northwest (NW) Arkansas, focusing on Hispanic/Latinx and Marshallese populations. CDC deployed a multidisciplinary team composed of behavioral scientists, medical officers and epidemiologists; an ADH epidemiologist and the CDC/ADH Epidemic Intelligence Service Officer joined the CDC team in the field. In addition, CDC subject matter experts supported the team remotely. The mission objectives included assessing drivers of COVID-19 transmission, assistance with epidemiologic data analysis, and supporting the expansion of community outreach and targeted messaging to Marshallese and Hispanic/Latinx populations.

As of June 15th, 2020, COVID-19 had disproportionately affected Hispanic and Marshallese populations in Benton and Washington counties. Nearly half of the adult cases were among Hispanic and approximately 19% were Marshallese persons; 40% of Hispanic cases and 28% of Marshallese cases reported employment related to poultry processing facilities. Hospitalizations and deaths among the Marshallese population were disproportionately high. Network analysis beginning with the first recognized cases in the area suggests some community spread, followed by a rapid increase in occupational relationships among cases who report employment in poultry processing facilities and a slow increase in community relationships during the early to mid-weeks of the outbreak; however, by early June there was substantial overlap of occupational, household, and community relationships**.**

In addition to financial barriers, Hispanic and Marshallese communities in Benton and Washington counties experience cultural and communication barriers to adopting prevention and mitigation recommendations. These barriers also limit uptake of testing for COVID-19, seeking medical care, and wrap around services. Furthermore, the lack of community-wide knowledge regarding COVID-19 symptoms, severity and transmission, along with misinformation, propagate stigma associated with positive test results. ADH conducts COVID-19 case investigations and contact tracing and provides testing for the community including Hispanic and Marshallese populations; however, with only one Spanish-speaking and 8 Marshallese-speaking case investigators in Benton and Washington Counties, ADH is unable to adequately respond to increasing case counts to address specific cultural and language barriers. In addition to the ADH, multiple other institutions and organizations are contributing to the COVID-19 response in NW Arkansas with limited coordination between these institutions.

Currently, there is widespread community transmission of COVID-19 among the Hispanic and Marshallese populations in Benton and Washington counties. The findings suggest that workplace interactions (particularly among workers of poultry processing facilities), household, and community interactions are contributing to the propagation of the virus. Assessment of COVID-19 transmission in poultry processing facilities was beyond the objectives of this mission; however, the epidemiologic, network and community data indicate that prevention, testing and contact tracing in poultry processing facilities as well as at community locations will be critical to slow the spread of COVID-19 among Hispanic and Marshallese populations in Benton and Washington counties.

Rapid control of the spread of COVID-19 will minimize morbidity, mortality, and the social and economic impact in Benton and Washington counties in NW Arkansas. To accomplish this goal the CDC provides specific recommendations in 5 general focus areas including:

Focus Area	Specific Recommendation

1. Targeted COVID-19 testing	• Use data driven approaches to prioritize testing in settings with the highest COVID-19 burden.
	  o Consider serial testing at 5 to 7-day intervals in high-burden settings.
	• Test household contacts as soon as possible after recognition of exposure.
	  o Consider serial testing at 5 to 7-day intervals for household contacts who previously tested negative until 14 days after the end of their last household exposure.
	• Include Marshallese or Spanish speaking staff in testing teams and increase the number of teams serving these populations.
	• Increase laboratory capacity for SARS-CoV-2 testing.
	• Ensure timely reporting of test results to clients with appropriate follow up instructions.
	  o Monitor time to complete critical testing processes from sample collection to delivery of results.
	• A detailed targeted testing proposal is included in Appendix 4.

2. Case investigations and contact tracing	• Prioritize contact tracing and case investigation for high occupancy households and settings. • Include bilingual Marshallese or Spanish staff in teams conducting case investigations and contact tracing and increase the number of teams. • Work with the community leaders to identify acceptable approaches and locations for isolation and quarantine. • Facilitate access to support services by increasing case-management staffing to support Hispanic or Marshallese patients and identify gaps. • Increase communication and coordination with employers to expedite case identification and mitigation.

3. Communication and Education	• Coordinate with community partners to provide targeted communication and education.
	• Incorporate methods that don't rely on literacy, with an emphasis on social media campaigns (especially Facebook and Facebook Live), short videos, and radio.
	• Specific educational needs include
	  o Basic information about COVID-19 transmission and risks, how prevention behaviors decrease risk of infection, testing and when to seek emergency care in the preferred language.
	  o Acceptance of COVID-19 testing and addressing myths and misinformation.
	• Consider the social, cultural, health, and well-being needs and concerns of the communities. Specifically, address discrepancies between ADH reported Marshallese COVID-19 deaths and data collected by the community.
	• A detailed prevention communication plan is provided in Appendix 5.

4. Coordination of COVID-19 prevention and control efforts	• Coordinate a multisector and multiagency plan that organizes and converges efforts to slow the spread of COVID-19 and reduce health, social and economic barriers. • Prioritize resources to support COVID-19 prevention and mitigation efforts among health care providers and other organizations that serve Hispanic and Marshallese communities. • Communicate and collaborate with employers, particularly with poultry processing facilities, on testing, case investigation, and contact tracing. Encourage employers to implement policies that support COVID-19 prevention and mitigation efforts. • Work with health care providers to facilitate rapid exchange of information, prompt targeted testing and appropriate placement of Marshallese and Hispanic patients with suspected or confirmed COVID-19, and ongoing investigation of cases and contacts. • Encourage and support Marshallese and Spanish speakers as care coordinators who can assist clients access medical care and wrap around services. • Encourage providers of wrap around services to coordinate their efforts so that gaps in services are addressed and avoided. • Foster collaborations between health care providers and the Marshallese and Hispanic communities that reduce cultural barriers and increase utilization of health care services. • Coordinate educational efforts to ensure that enough medical interpreters and bilingual care coordinators are available to address the needs of Marshallese and Hispanic patients.
5. Data collection, analysis and reporting	• Reduce missing data by prioritizing the collection of key variables (e.g., race/ethnicity, address, employment, comorbidities, possible contacts/exposures). • Ensure paper-based contact tracing data is transferred to electronic reporting systems; explore methods of electronic data collection. • Reduce duplication of data collection efforts for COVID-19 and streamline data cleaning processes. • Inform COVID-19 trends to Hispanic and Marshallese communities. • Provide standard translated scripts in Spanish and Marshallese for consistency of data collection.

Section A: Background and Mission

COVID-19 cases in the two NW Arkansas counties of Benton and Washington were among the counties with the highest number of reported cases in the state.

The Arkansas Department of Health (ADH) requested technical assistance from CDC to characterize the patterns of COVID-19 transmission in Benton and Washington counties, with a focus on Hispanic/Latinx and Marshallese populations.

As part of the public health response to COVID-19, a CDC team was deployed to NW Arkansas during June 13 – July 4, 2020 to:

- Determine drivers of transmission in Hispanic/Latinx and Marshallese communities in Benton and Washington Counties.
- Assist with processing and synthesizing epidemiologic data and assess trends.
- Support the development of community outreach to Hispanic/Latinx and Marshallese communities and targeted messaging to high priority areas.

The CDC multidisciplinary team was composed of behavioral scientists, medical officers and epidemiologists which were joined by ADH an epidemiologist and a CDC EIS Officer in ADH. In addition, CDC subject matter experts provided remote support.

The CDC/ADH Field team in NW Arkansas included:

CDC:

- Angela L. Hernandez — Epidemiologist/CDC Team Lead
- Juliana Da Silva — Medical Epidemiologist/CDC Team Lead
- Daniel Martin — Epidemiologist
- Elisabeth Krow-Lucal — Epidemiologist
- Emily Lilo — Communication Specialist
- Jerry Mazurek — Medical Officer
- Katherine Center — Behavioral Scientist
- Nichole Zimmerman — Behavioral Scientist

Arkansas Department of Health

- Allison James — CDC EIS Officer/ADH Point of Contact
- Kristyn Vang — Epidemiologist

Section B: Epidemiologic analyses of COVID-19 among Hispanic/Latinx and Marshallese population

The Arkansas Department of Health provided data through June 15, 2020 to characterize Hispanic/Latinx and Marshallese persons reported with SARS-CoV-2 infection (COVID-19) in Benton and Washington Counties.

Data considerations

Data were extracted from Arkansas Research Electronic Data Capture (REDCap) database as of June 15, 2020, and cases reported from 1/1/2020-6/13/2020 were analyzed (cutoff due to lag in reporting cases) using the following approach:

- Dataset was deduplicated
- Due to incomplete onset data, an "Earliest Onset Date" variable was calculated which was comprised of the earliest of reported date of onset, date of specimen collection, or case report for each case
- Data were analyzed by:
    - Basic demographics (age, sex, race/ethnicity)
    - Time series based on Earliest Onset Date
    - Employment (self-reported)
    - Residential address of case when reported
    - Hospitalizations and deaths
- At ADH's request the analyses focused on Hispanic and Marshallese populations in Benton and Washington county (based on community and ADH information, almost all persons categorized as Native Hawaiian/Pacific Islanders in NW Arkansas are Marshallese; the terms Pacific Islanders and Marshallese are used interchangeably)
- Residential clusters were identified by exact-match addresses. These clusters were mapped, and further categorized:
    - By race/ethnicity of the cases in that household
    - By employment of all cases in the household
    - By employment and race/ethnicity of the case with earliest onset (presumptive primary case) in that household
- Due to concerns about overrepresentation of Marshallese among reported deaths and potential contribution of comorbidities to reported deaths, multivariate analyses were conducted using data with age categorized to groups, a variable combining sex and pregnancy, a variable combining race and ethnicity, reported comorbidities, hospitalization, and death.

Overview and Findings

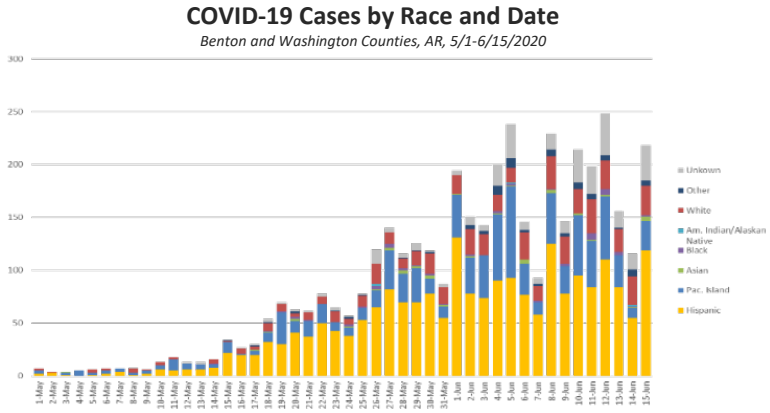
CDC characterized the epidemiology and patterns of spread of COVID-19 in Benton and Washington counties, with focus on Hispanic/Latinx (used interchangeably) and Pacific Islander (referred to as Marshallese) populations. These two populations have experienced COVID-19 disease burden disproportionate to their size.

Table 1. Population and COVID-19 reported cases as of June 13, Benton and Washington Counties, AR

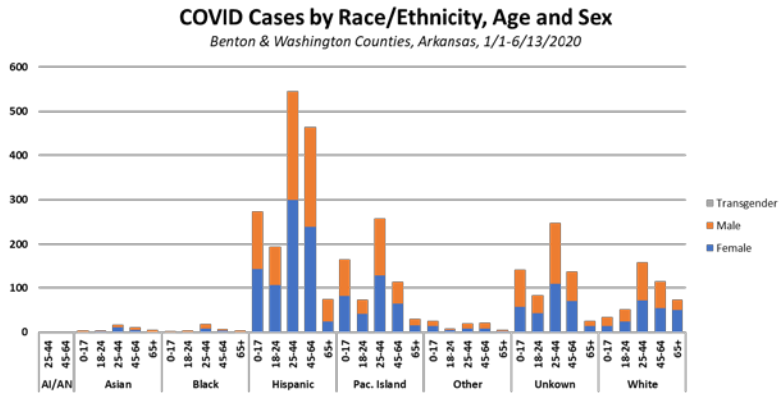
Race/Ethnicity	Population	COVID-19 reported (cases as of June 13)	Crude Incidence (cases per 100,000 pop.)
Hispanic, all races	86,581 (17%)	1,554 (45%)	17.9
Pacific Islander	7,712 (1.5%) *	647 (19%)	83.9
All Others	415,276 (81.5%)	1,235 (36%)	2.9
Total	509,569	3,436	6.7

*Number from US Census 2018 reported for consistency. According to the RMI Consul General of Arkansas and ADH the actual Marshallese population is closer to 10,000-15,000 (at 12k the proportion would be 2.4%). Note that Marshallese are not required to complete visas to enter the US.

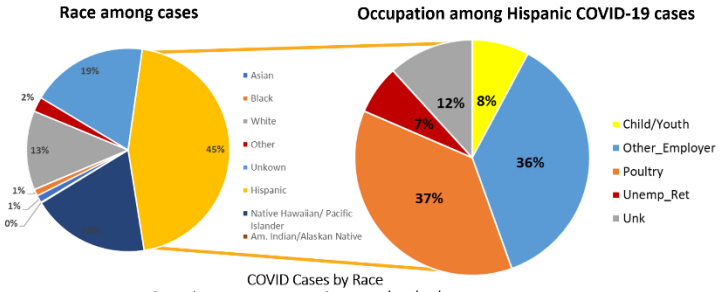
Case incidence in the two-county area increased during the assessment period (analysis truncated as of 6/15/2020), particularly among Hispanic and Pacific Islander/ Marshallese populations.



Cases among Hispanic and Pacific Islander-Marshallese are predominantly aged 25 - 44 years; cases appear to be evenly distributed between males and females at all ages and race/ethnicities; although the proportion of males is slightly higher among Hispanic persons over 65 years, and the proportion of females slightly higher among White, Non-Hispanic persons over 65 years.

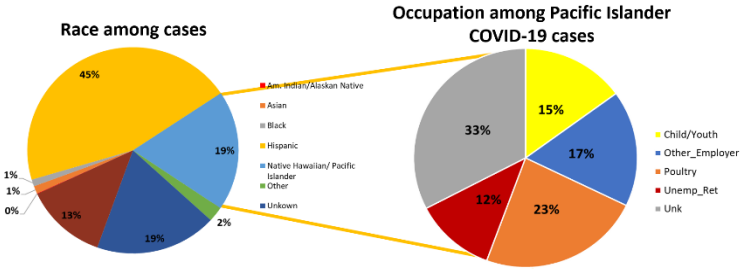


Hispanics account for about 45% of all cases in the two-county region, and of those persons, 37% work in the poultry processing facilities. Another 36% work in other industries, 7% are retired or unemployed, 8% are under the age of 18, and for 12%, employment status is unknown.



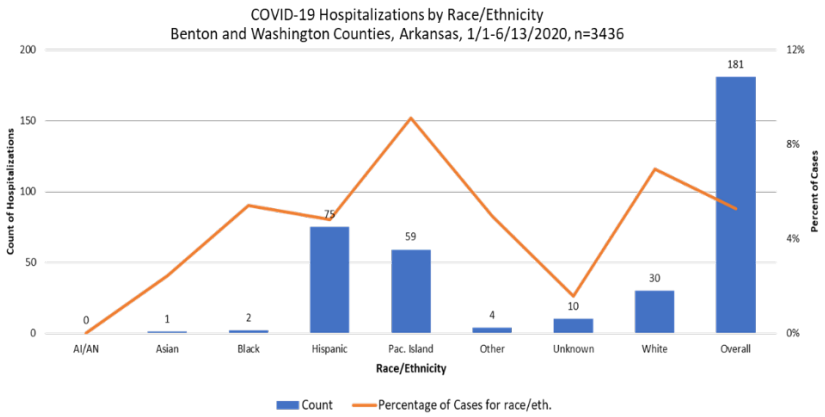
COVID Cases by Race
Benton & Washington Counties, Arkansas, 1/1-6/13/2020, n=3436

Race/ethinicity data was not disaggregated by nationality, and Pacific Islanders were assumed Marshallese according to both the Marshallese community and ADH. Marshallese account for about 19% of all cases in the two-county region, and of those persons 23% work in the poultry processing facilities. Another 17% work in other industries, 12% are retired or unemployed, 15% are under the age of 18, and for 33%, employment status is unknown.

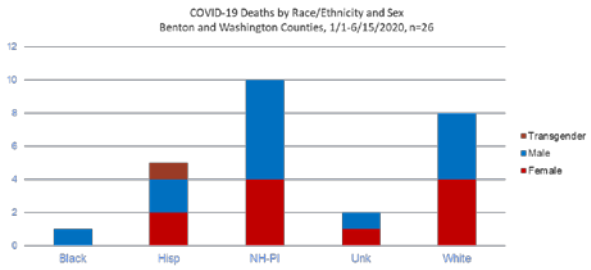


COVID Cases by Race
Benton & Washington Counties, Arkansas, 1/1-6/13/2020, n=3436

Overall, 181/3,436 (5%) of cases to date have been hospitalized, and the ratio of hospitalization varies by race/ethnicity from 75/1,554 (5%) for Hispanics to 59/647 (9%) for Pacific Islanders/Marshallese. Ratios among other race/ethnicity groups are based on small denominators and should be interpreted with caution.



Despite representing only 1.5-3% of the population of the two-county region, Pacific Islanders-Marshallese account for 38% of reported deaths, with males slightly outnumbering females among Pacific Islanders but not for other race/ethnicity groups.



Race/Ethnicity	Death Ratio per 100k Population	Death Ratio per 1000 Cases
Hispanic	5.77	3.22
Native Hawaiian/Pacific Islander	83.33 - 129.67 *	15.46
Black	7.66	27.03
White	4.03	18.52
All Races	**5.10**	**7.57**

* Rate varies with population estimate. US Census est. NH-PI population 7,712 (rate 129); local community estimates 12,000 (rate 83)

Overall death rate is 7.6 per 1,000 cases with variation between race/ethnicity groups.

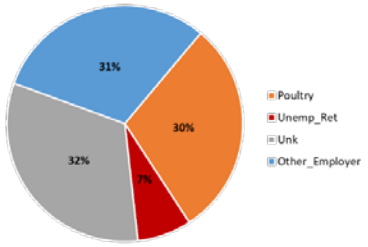
Multivariate analysis of death data shows (See tables in Appendix 1) that age and race/ethnicity are strongly associate with death after controlling for comorbidities and pregnancy:

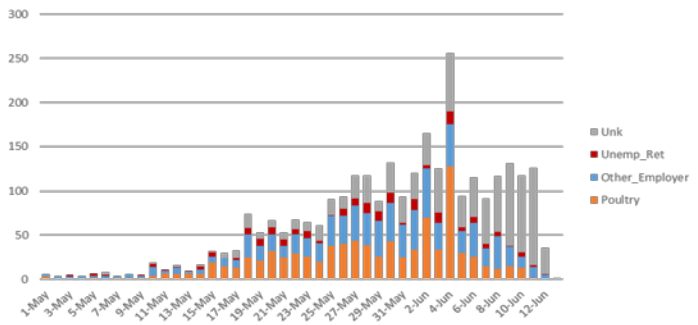
- The odds of death for Hispanic persons are significantly less than other race/ethnicity groups.
- The odds of death for Pacific Islander/Marshallese are significantly higher than other racial/ethnic groups (e.g., 25 times higher than among Hispanic persons).
- Pregnancy appears to be significantly associated with death (occurring in 1 of 30 pregnant women reported).
- Limitations in the analysis include the small sample size with few deaths (n=21 as of 6/13/2020), the relatively large number records with missing information regarding death (42%) and the lack of data regarding potentially-confounding comorbidities such as obesity.

About a third of all employment-aged (>18 years) cases reported working in poultry processing facilities; 40% were Hispanic and 28% were Marshallese. Trends in the proportion of cases among persons reporting employment related to the poultry processing facilities show an increase at the beginning of the period, and an apparent decrease in more recent dates. This decrease may be an artifact due to a lag in reporting and missing employment information and should be interpreted with caution.

Employment of Adult COVID-19 Cases and Case Trend by Employment Type

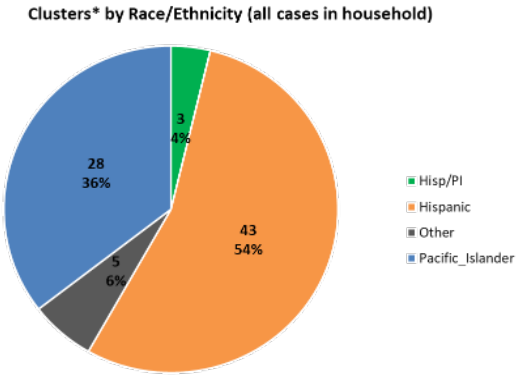
All Races





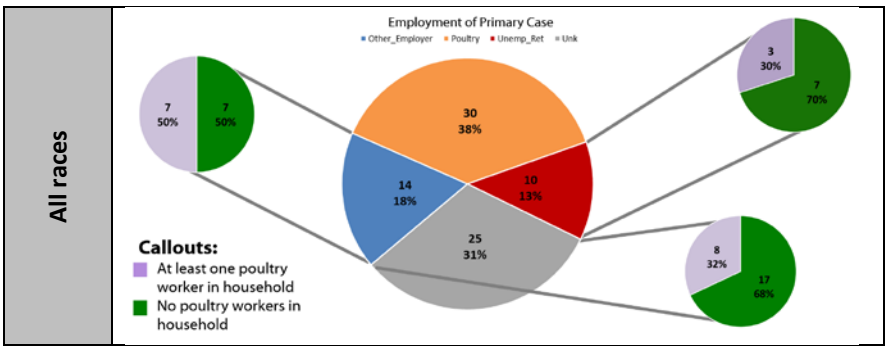
Note differing y axes for each group

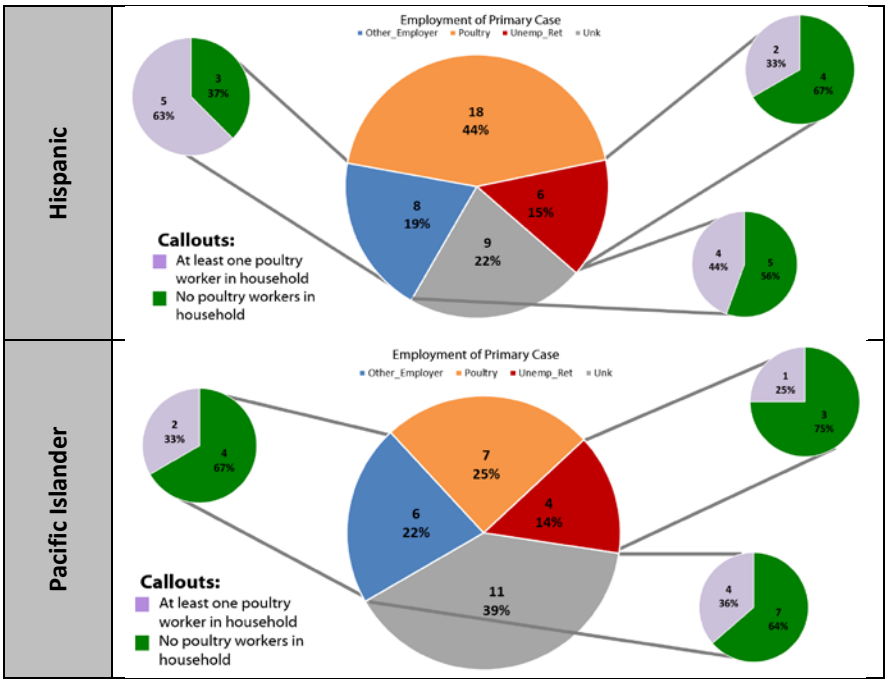
Analysis of cases by residential address revealed 79 households with four or more cases of likely co-habitants. Only 3/79 (4%) of these clusters included cases of both Hispanic ethnicity and Pacific Islander race in the same household. 43 (54%) were households of Hispanic persons, 28 (35%) were of Pacific Islanders, and the remaining 5 (6%) were of persons of other race/ethnicities.



*Cluster is defined as ≥ 4 cases at one address

Of the household clusters identified, cases were analyzed by date of onset, and the case with earliest onset in each cluster was identified as the presumptive primary case for that cluster. Of those 79 presumptive primary cases, 30 (38%) were reported as poultry processing facility workers, including 18 (60%) of Hispanic ethnicity and 7 (23%) Pacific Islanders. For those clusters whose primary case was not reported as poultry processing facility worker, a total of 18/49 (37%) had at least one reported poultry processing facility worker case in the same household. Altogether, 48/79 (61%) of clusters included at least one reported poultry processing facility worker case.





Data on other gathering places that cases may have attended in the 14 days prior to symptom onset were so infrequently reported that analysis was deemed uninformative.

These household clusters were mapped and found to concentrate in the two communities of Rogers (Benton County) and Springdale (Washington County). Race/ethnicity distribution of the identified clusters was unremarkable, with majority-Hispanic and majority-Pacific Islander clusters in both Rogers and Springdale.

Additional analysis of addresses that include apartment numbers revealed at least 20 apartment complexes at which seven or more cases, and as high as 45 cases, have been reported. Further investigation of these apartment complexes is recommended, as these data are highly indicative of possible loci for community spread.

Overall, epidemiologic analysis suggests both community and workplace spread of COVID-19. In many cases there is sufficient overlap between data indicative of workplace spread and others indicative of residence clustering, that no definitive conclusion may be drawn. It is therefore recommended that control measures and mitigation messages be disseminated to encourage safe social practices everywhere, and not to focus on one location (workplace, home, or other gathering place) to the exclusion of others.

Section C: Temporal Analysis of Relationship Networks of COVID-19 Cases in Benton and Washington Counties, Arkansas

Overview

This network analysis was conducted to understand the relationships between COVID-19 cases that may be contributing to the outbreaks within Hispanic and Marshallese communities of NW Arkansas. The objectives of the analysis are 1) identify potential clusters of COVID-19 cases, 2) retrospectively characterize networks and transmission patterns over time, and 3) identify areas for further investigation and targeted interventions based on resultant transmission patterns.

Data considerations and inclusion criteria

All data were obtained from the Arkansas Research Electronic Data Capture (REDCap) database. A frozen data set downloaded June 15, 2020 was used for analysis which included the time period of 1/1/2020-6/13/2020. Networks were generated using MicrobeTrace.

Data included only laboratory-confirmed cases of COVID-19 by RT-PCR from all patients residing in Benton and Washington Counties who met one of the following criteria: self-identified as a poultry processing facility employee; resided at the same address as a self-identified poultry processing facility employee; or identified a confirmed case as the possible source of infection during the case investigation. Temporal analyses were performed using onset of illness defined as the earliest date of symptom onset for symptomatic cases or specimen collection date for asymptomatic cases.

Cases for the entire timeframe were plotted. The relationship links were then plotted by week of earliest onset—for example, if case B who was diagnosed on April 5 named case A who was previously diagnosed on 3/25 as a possible source of infection, the link will appear during the week of March 22-28.

Findings

Of the 3,464 cases recorded in the REDCap database, 1,797 (52.3%) were part of the network analysis including 1,045 (67.7%) of the total reported Hispanic cases and 338 (51.2%) of the Marshallese cases (Table 2) .

Table 2. Cases Included in the Network Analysis by Race/Ethnicity

Race	Cases in Frozen Data Set (Benton/Washington Counties)	Cases Included in Network Analysis (%)
Hispanic	1,544	1,045 (67.7%)
Marshallese	660	338 (51.2%)
Unknown/Other	1,232	414 (33.6%)
TOTAL	3,436	1,797 (52.3%)

Due to low case counts, all cases through April 26 (n=101) were included in Epiweek 18 (April 27-May 3). One additional case from June 15th (Epiweek 25) was included in the count for Epiweek 24.

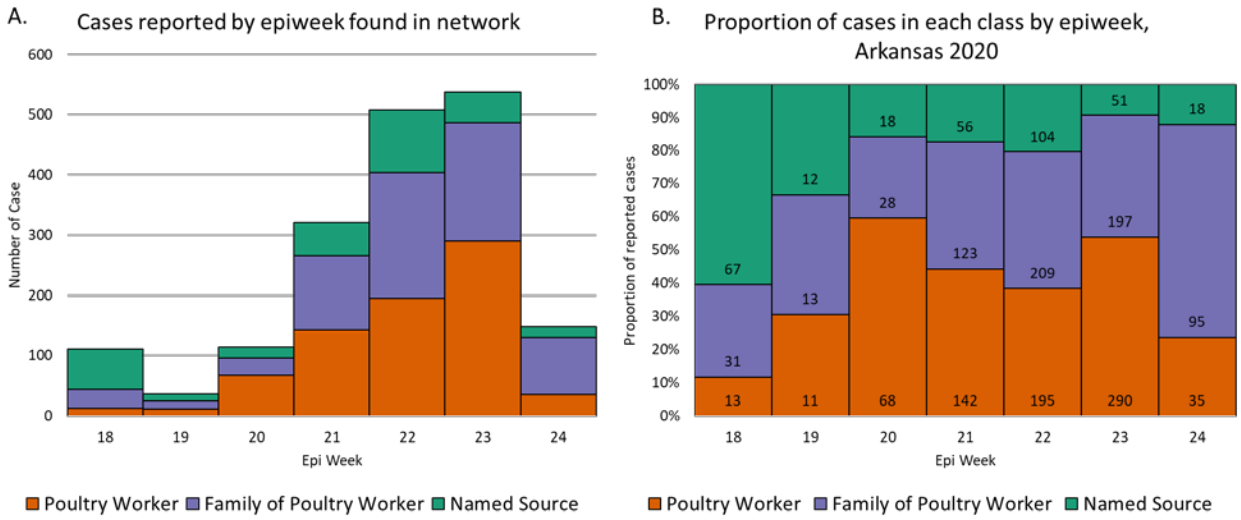
Characteristics of persons in the networks

Persons were classified as a poultry processing facility worker, co-habitant, or community contact based on first appearance in the database. Of all cases in the network analysis, 920 were self-identified poultry processing facility workers (i.e., poultry worker), 808 were co-habitants of poultry workers, and 665 were community contacts (Table 3).

Table 3. Number of Cases by Category

Category	N
Poultry Workers*	920
Co-habitants	808
Community Contacts	665

*Self-identified poultry processing facility worker or employee

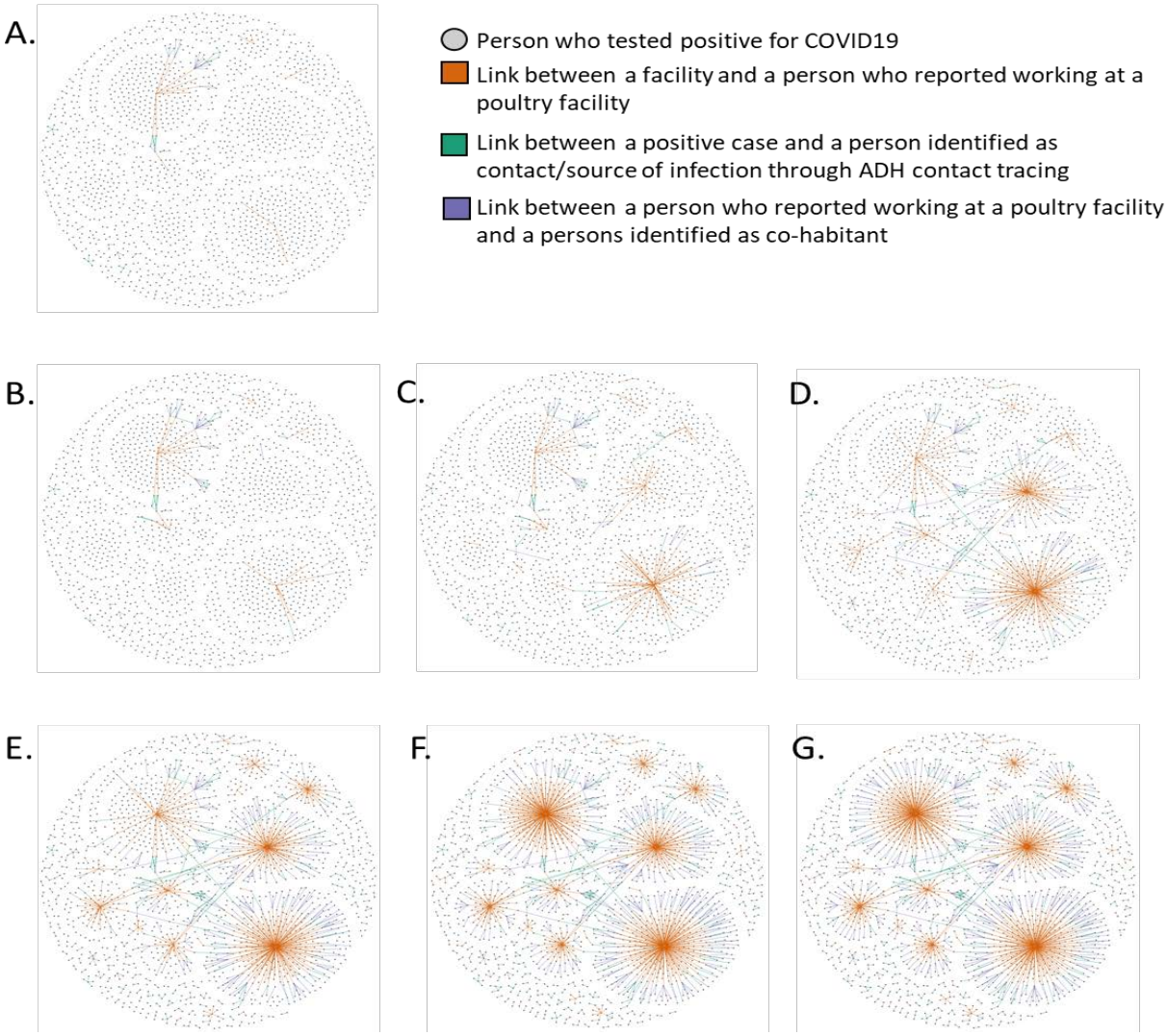


Using those classifications, we looked at the number (A) and proportion (B) of cases over time to evaluate potential mechanisms of transmission in this time period:

- As seen in panel A, the number of cases increased over time, peaking in week 23. The apparent decrease in week 24 is likely an artifact due to a lag in reporting. Evaluation of case counts in the period of interest taken from the REDCap database on June 28^{t} shows that cases continued to increase.
- To understand the relationships among cases we looked at the proportion of cases reported in each class over time – early in the outbreak, the majority of cases were found in named sources and family members. By week 20, however, there is a large shift to the majority of cases being reported among persons who identified themselves as poultry processing facility employees. In weeks 18 and 19 the majority of cases were named sources (50.3%) and co-habitants of poultry workers (28.0%). In week 20, poultry workers made up the majority (59.6%) of the cases while co-habitants (24.6%) and community sources (15.8%) occurred less frequently.
- These results suggest a shift from primarily community relationships to occupational (poultry processing facilities) relationships as the outbreak progresses.

Transmission network

The MicrobeTrace software was used to discover, understand, and communicate community, household, and occupational relationships among confirmed cases. Each grey dot represents a person who tested positive for COVID-19. The large circles made up of orange lines represent individual poultry processing facilities. The color of the line between points represents the relationship between the two diagnosed cases – orange for persons who work at the same poultry processing facility, green for persons who were identified through the contact tracing investigation, and blue for persons who are co-habitants with a poultry worker. All cases in the network are shown in each figure, links enter the network based on the appearance of the first linked case – for example in the case of a community contact, the link appears when a case is named as a source; the link then is drawn between the naming case and the named case. Multiple linkages are represented by a dotted line with multiple colors – for example if a co-habitant was also a named source of infection, the link will be both green and blue dotted line.



A. Week 18 (Onset prior to May 3) B. Week 19 (May 4 – May 10) C. Week 20 (May 11 – May 17) D. Week 21 (May 18 – May 24) E. Week 22 (May 25 – May 31) F. Week 23 (June 1 – June 7) G. Week 24 (June 8 – June 15).

This figure shows the temporal progression of associations among cases through June 15th. Note that the data was frozen on June 15th so there is likely an underreporting of cases in Week 23 and Week 24.

- Case counts remain relatively low in the first few weeks (panels A and B, respectively), however in weeks 20 and 21 (panels C and D) an increase in the number of cases associated with 2 poultry processing facilities is observed.
- The large cluster of cases linked by orange lines in the bottom right represents persons who are linked only by their association to that poultry processing facility. In Week 22 (panel E), cases spread to co-habitants of poultry workers (blue lines) in those two facilities as well as increasing number of cases found in other poultry processing facilities. In week 23 (panel F), there is a large increase in cases associated with a third facility; the increase in cases at the third facility is likely the result of a facility-wide testing event at that location. In week 24, co-habitants of poultry workers at this facility were diagnosed.
- It should be noted that cases employed by one of the facilities (panels A –E, upper left node) were some of the earliest cases in this community. However, case counts associated with this facility did not increase at the speed of other facilities.
- Temporal analyses of networks suggest rapid increase of occupational relationships among cases and a slow increase in community relationships among COVID-19 patients in the early-mid weeks of the outbreak.
- By early June (panel F) there is substantial overlap of occupational, household, and community relationships among COVID-19 patients.
- The increased cases among poultry workers, and subsequently their co-habitants, suggests there may be high numbers of undiagnosed COVID-19 patients working in poultry processing facilities; and people may be motivated to seek testing when someone in their home is diagnosed.

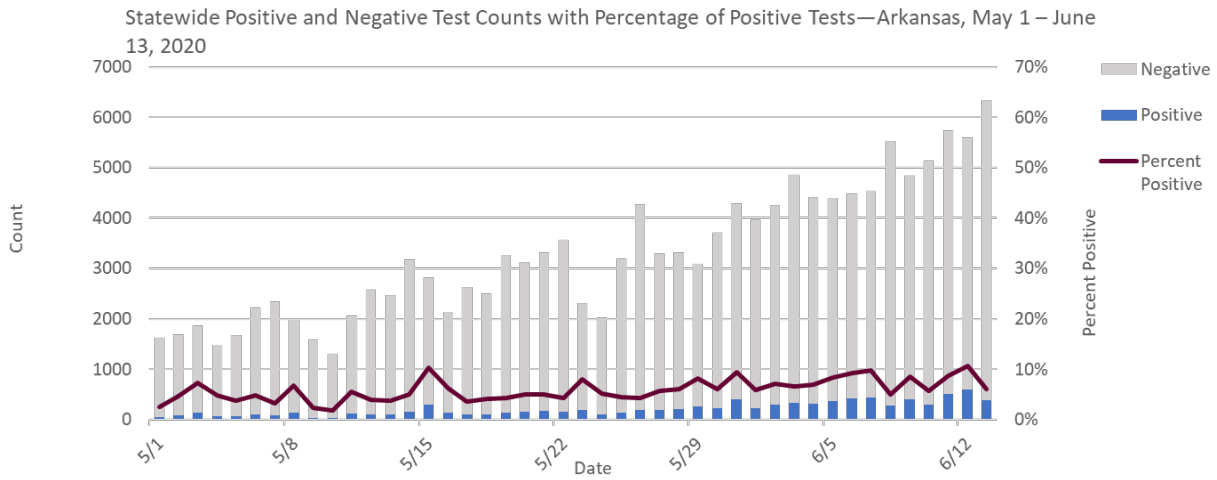
Caveats and limitations

These findings are preliminary and are not without limitations:

- Occupational contact information was not available. Data regarding addresses of contacts who remain negative is needed to better understand the role of occupation in COVID-19 spread.
- Given the role of poultry processing facilities as a major employer in the region, it is very difficult to attempt to disentangle occupational transmission of SARS-CoV-2 versus community transmission.
- We have limited follow-up on community contacts, especially those contacts who were tested and were negative.
- Marshallese persons are under-represented in the network, potentially due to contact tracing information being stored outside of the network on paper forms.
- Finally, links are created based on self-reported address and occupation data, as well as named source of infection. Patients who were unable to be located and undiagnosed patients may contribute additional links and information different from what was included in this analysis.

Section D: COVID-19 Testing

From May 1 through June 13, 2020, statewide testing increased, but the positivity rate remained constant. A comprehensive assessment was not conducted due to incomplete reporting of demographic information on negative test results.



Testing data can't be interpreted without the knowledge of how populations at different risk levels have accessed testing. Testing is not a random sample strategy and may be differentially offered to populations at different risks of acquisition. Therefore, it is an imperfect indicator of the epidemic trend.

There is insufficient data to conclude that an increase in testing has led to an increased proportion of reported cases in the Hispanic and Marshallese populations. Regardless, case counts in both populations have increased in recent weeks, indicating ongoing transmission of SARS-CoV-2 in Benton and Washington counties.

Section E: Community outreach, site visits and focus groups

To better understand the Hispanic and Marshallese communities in Washington and Benton counties, the team met with community leaders, visited local businesses and churches, and met with community members.

Key Informant Meetings

Hispanic Key Informants

Hispanic community leaders described the community in NW Arkansas as economically diverse. Overall, people are working jobs where they have risks of COVID-19 infection, have difficulties isolating or quarantining when needed, and lack both economic resources and a safety net. An overarching concern was that if workers are expected to stay home when sick or waiting for test results—or if businesses were to close for a time to slow the spread of COVID-19—that people

would need broad financial support. A second concern was that because of this financial need, people are putting themselves at risk. This group expressed a need for actionable items that can be advocated for on behalf of the community, as well as greater emphasis on culturally sensitive messages to the Hispanic community. Representatives of the following Hispanic groups were present:

- **Arkansas United,** Arkansas' first immigrant rights organization founded in 2012. They focus on advocating, identifying, and facilitating services for immigrants across the state.
- **Hispanic Women of Arkansas,** a non-profit organization founded in 1999 that strives to advance educational opportunities for Hispanic women and their families, to celebrate and teach others about Latinx culture, and to become active participants in the community.
- **Rogers-Lowell Area Chamber of Commerce**, an organization for community engagement for business and community leaders in the Rogers-Lowell area.
- **Latinx COVID-19 Task Force,** a statewide group created to respond to the current outbreak.

Marshallese Key Informants

Marshallese community leaders described the community in NW Arkansas as extremely close with strong ties to each other both locally and internationally. They expressed concern that people are working jobs that may put them at risk to acquire COVID-19 and lack both economic resources and a safety net. The leaders also requested increased oversight of the poultry processing facilities. An overarching concern was that the Marshallese don't qualify for Medicaid and can't afford health care. A second concern was that the Marshallese—both in Arkansas and globally—are troubled by discrepancies between the number COVID-19 deaths among Marshallese reported by ADH and those counted by the community. A third concern was about a variety of difficulties that Marshallese people experience when trying to use healthcare facilities and support services. Representatives of the following Marshallese groups were present:

- **Republic of the Marshall Islands Consulate General – Arkansas**, the Marshallese office responsible for protecting the interests of Marshallese living in Arkansas.
- **Arkansas Coalition of Marshallese (ACOM**), a non-profit organization focusing on initiatives to improve the quality of life in the Marshallese Communities of NW Arkansas.
- **Marshallese Educational Initiative (MEI)**, a non-profit organization that promotes the cultural, intellectual, and historical awareness of the Marshallese people and facilitates intercultural dialogue to foster positive social change.
- **Dr. Sheldon Riklon,** a local Marshallese physician.
- **Marshallese COVID-19 Task Force,** a group created to respond to the current outbreak.

Site Visits

Site visits were made to Hispanic- and Marshallese-owned businesses in Benton and Washington counties to observe COVID-19 prevention behaviors and communication. A local community member recommended places to visit and translated as needed. As a comparison, the team also observed COVID-19 prevention measures in Washington and Benton counties overall, visiting churches, community centers, parks, restaurants, and shops. Site visits to poultry processing facilities were beyond the objectives of the mission.

Hispanic/Latinx Sites

Within the Hispanic/Latinx community, the team visited a total of 19 different businesses, including restaurants, bakeries, and grocery stores. Site visits occurred in both Benton and Washington counties.

Marshallese Sites

There were 4 known Marshallese-owned businesses; however, two were closed due to illness. All four shops were within in Springdale, in Washington County.

Site Visit Findings

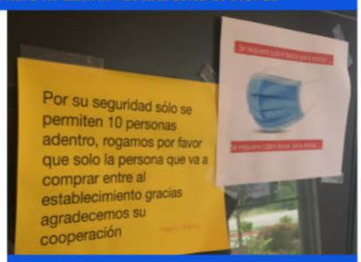
Observations from site visits showed that most businesses were taking some measures to prevent the spread of COVID-19, including posting signs on doors, floor markers at 6 ft intervals, plastic barriers for cashiers, employees wearing masks, and restaurants had increased social distancing or were now drive-through only. Many of these signs were hand-written in either Spanish or English. Business owners/managers were concerned about customers not wearing masks but felt that they couldn't enforce it. Business owners had questions about when employees could safely return to work after recovering from COVID-19, as well as what to do when an employee was tested but had not yet received their test results. CDC door signs and educational materials were provided in either Spanish or Marshallese (see Appendix 2 for full list of materials provided).

Casual observations of non-Hispanic/Latinx or Marshallese locations in Washington and Benton counties, showed that most businesses had signs posted, but did not require customers to wear masks. Restaurants and retailers were not at full occupancy but seemed to be consistently busy. In general, people seemed to be social distancing in public. Many churches in the area seemed to have adopted some COVID-19 prevention measures. Those that we contacted had shifted to online—or mostly online—services. Church staff were actively involved in COVID-19 education and prevention, as well as working to support their communities emotional and physical needs remotely (e.g., online gatherings, food deliveries).

Signs in Spanish outside grocery

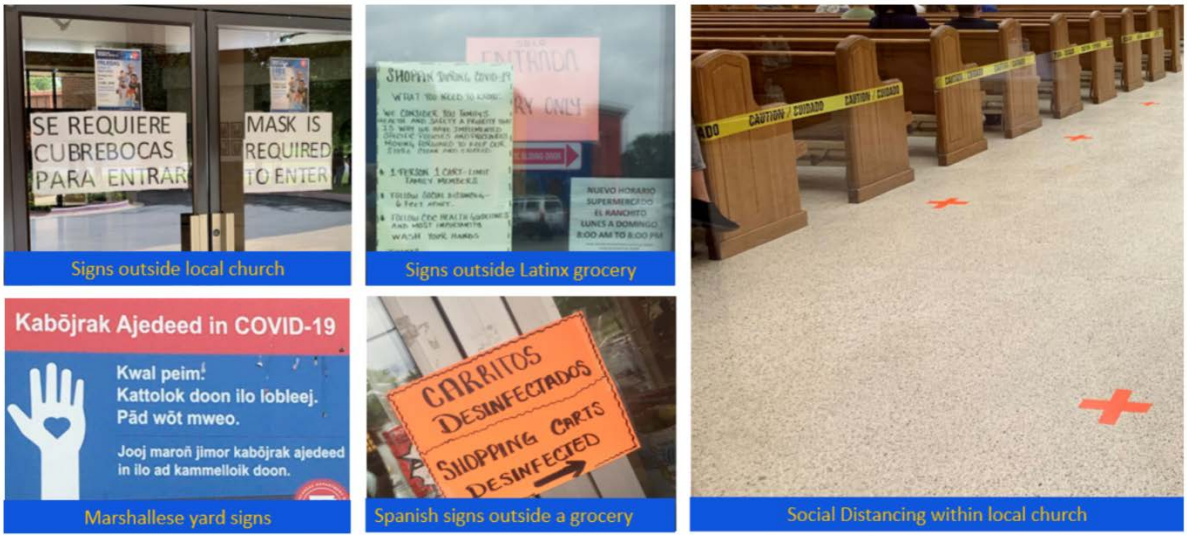
Social Distance markers in Latinx restaurants & stores

CDC sign outside Marshallese store



Signs in Spanish outside bakery


Statues inside local community center



Pictures of artifacts observed during site visits in Marshallese and Hispanic communities

Community Focus Groups

The team conducted six focus groups with the Marshallese and Latinx communities. These were arranged by community leaders and took place either in-person or over Zoom. Translators were provided in order to ensure that community members didn't need to speak English to participate (See Appendix 3 for list of all questions).

Focus Groups with the Marshallese Community

Three Marshallese focus groups were conducted via Zoom.

Youth Focus Group

This group included 8 younger Marshallese people and lasted about 80 minutes. The discussion was held entirely in English and was organized by MEI.

Adult Focus Group

This group included 12 members of the Marshallese community, including poultry workers as well as COVID-19 patients. The discussion lasted approximately 90 minutes and was largely in English. ACOM organized this group and provided translation.

Religious Leadership Focus Group

This group included 6 pastors of local Marshallese churches and lasted approximately 110 minutes. This discussion was held entirely in Marshallese. The Consul General (RMI-Arkansas) organized this group and provided translation.

Focus Groups with Hispanic/Latinx Community

Three Hispanic/Latinx focus groups were held, two in person and one via Zoom. Arkansas United organized all three groups.

Youth Focus Groups

The first group included 6 younger Latinx people and was held in-person at St. Raphael's Catholic Church in Springdale. The discussion lasted about 60 minutes and was held in English.

The second group included 12 younger Latinx people and was held online. The discussion lasted about 60 minutes, in English.

Adult Focus Group

This group included 12 members of the Hispanic/Latinx community, including poultry processing facility workers and local business owners. The session was held at St. Raphael's Catholic Church

in Springdale and lasted approximately 110 minutes. The discussion was held in Spanish, led by a member of Arkansas United. Spanish-speaking members of the team took notes in English.

Focus Group Findings

In this section we describe some of the themes that emerged in our many conversations. These findings are separated by community; however, it is important to note that both the Hispanic/Latinx and Marshallese communities in Benton and Washington counties in NW Arkansas have many of the same barriers.

Hispanic/Latinx Community Strengths and Barriers

Strengths

The Hispanic/Latinx community is very concerned about COVID-19 and are actively involved in community taskforces, as well as establishing grassroots relief efforts for those affected by COVID-19. There are many organizations, including churches, that offer help and guidance to the community and representatives who are active with state and local leaders to ensure the community has a voice.

Barriers

The barriers to preventing the spread of COVID-19 in the Hispanic/Latinx community were classified in four themes:

Barrier 1: Adoption of Preventive Behaviors

"We act differently if we think we don't have the virus – we don't wear the masks. We need to act more like we are all exposed."

The community expressed confusion caused by inconsistent messages from authorities, changing guidance, and the reopening of the state. People reported feeling anxious about a lack of concern in the community. Business owners expressed concern and frustration that customers are not following guidance. Both age groups reported that their friends and family are gathering. People are continuing to work because they don't feel sick, or don't have their test results or are being called to work by employers. Pressure to work is both financial and coming from employers.

Barrier 2: Testing Concerns

"I have constant fear of being positive. I prefer not to know – I have a picture in my head if I am positive that is so complicated that I just prefer not to get tested."

The Hispanic/Latinx community is apprehensive about testing for several reasons, including not being allowed to work if they are positive, fears of deportation, and the stigma of testing positive. There is also confusion and anxiety about testing, including what the multiple tests are for and fears that testing is painful. In particular, people believed that the COVID-19 blood tests were better because they could get the results more quickly. People also were unsure about the testing process, especially how to get results.

Barrier 3: Need for increased understanding and awareness

"Misinformation is worse than the disease."

"We need more information in Spanish, the good information."

People reported a lot of misinformation, myths, and uncertainty about all aspects of prevention, testing, and treatment of COVID-19. They described how the community gets most information from each other rather than directly from a reputable source. Our participants were unaware of local, community-led resources that were available, such as a Spanish help line.

Barrier 4: Under-resourced community

"Our worst fear is: do I eat versus do I get sick?"

"Small businesses don't have enough funds to afford PPE."

Although the Hispanic/Latinx community is economically diverse, they are still an under-resourced community. Many people feel they have no choice but to continue to work and cannot afford to seek medical treatment. Smaller businesses are struggling to keep their staff and customers safe while staying open.

Marshallese Community Strengths and Barriers

Strengths

The Marshallese have a strong community bond and take care of each other, treating everyone from the Marshall Islands like an extended member of their own family. The community is very concerned about COVID-19. They have assembled a COVID-19 taskforce and are actively tracking Marshallese cases and deaths. They are developing a community helpline. The community includes a local consulate office, many churches, and two organizations that have partnered with local health systems on grants.

Barriers

The barriers to preventing the spread of COVID-19 in the Marshallese community were classified in four themes:

Barrier 1: Communication Barriers

"Medical consent is all in English, so we don't know what we are signing."

"The community needs education in general about Coronavirus from lots of sources, and it needs to be repeated."

The Marshallese are a small community and it is unlikely that non-Marshallese speak the language. Not being able to communicate at work, medical facilities, and other service and support providers is a large barrier. This leads to many miscommunications or misunderstandings around prevention, testing, health care and support services. In this void, people are getting information from each other. COVID-19 has increased misinformation and anxiety.

Barrier 2: Distrust with Healthcare Systems

"I wouldn't want to take my family to the hospital now because I can't be there to make sure they aren't mistreated."

Due to the complex history of the Marshallese people, and limited translation services and bicultural staff there is an overall anxiety and distrust in western health care, especially with hospitals. This community reported anxiety over procedures and fears of mistreatment by health providers that existed prior to COVID-19. The Marshallese people are typically reluctant to seek medical care and tend to avoid hospitals as much as possible. However, this situation is exacerbated by COVID-19, and likely reflects the high numbers of deaths among Marshallese. The Marshallese people also expressed that support services for COVID-19 were unavailable to them, citing the hotel isolation wrap-around service as an example of a service that they had tried unsuccessfully to use. Another example was related to not having an opportunity to discuss and understand the treatment provided to a family member. Not having enough Marshallese translators is part of the problem, as well as limited number of hospital staff to help them navigate the system. Furthermore, the COVID-19 restrictions on visitors in hospitals is especially hard on the Marshallese people who already fear hospitals and medical mistreatment,

and who have difficulty talking to providers about the care of a loved-one. This community also asked several times about the discrepancy between their community-identified number of Marshallese deaths and the official report by the state, adding to the distrust.

> ***"Can you explain why the state's numbers of Marshallese deaths are so low? We need the data."***

Our team was asked this question every time we met with any Marshallese people. It is clearly highly concerning and needs to be addressed in order to alleviate the stress and confusion of the Marshallese in NW Arkansas, in the Islands and around the globe. Specifically, the Marshallese needs to understand the state's death reporting process and reasons why deaths counts from the state may at times be lower than the community tally. This should be done to decrease community anxiety and increase understanding of the process. Some ongoing communication may also be needed going forward as COVID-19 continues.

Barrier 3: Cultural Barriers to Social Distancing

> ***"Gathering is common. If you give us a little leeway, we will gather."***
> ***"If you are Marshallese, you are family. Even if you not family."***

The Marshallese participants felt their friends and family were not willing to practice social distancing and explained that while some were following guidance, some would never follow it, and some were in the middle. Marshallese also often live in large households, typically including extended family with one bathroom and one vehicle. Many Marshallese adults are employed at poultry processing facilities, where they work in close proximity to others and share activities like talking before and after work and during breaks, and sharing rides is likely.

Barrier 4: Severely under-resources community

> ***"All of the inequities were here before COVID-19, but it has now taken them up a bit."***
> ***"Transportation is hard if part of the household is positive, but others are not."***
> ***"Shortness of supplies like masks, cleaning supplies, and hand sanitizer is still a problem."***

The Marshallese people cannot afford to stay away from work and do not currently have access to Medicaid. The costs of medical bills and lack of insurance through their employers have many of them feeling they cannot afford to seek care when they are sick. As a community, they are doing what they can to raise funds, but the programs that do exist do not meet their needs. There seems to be a strong disconnect between what support may be available in the broader local community and the options the Marshallese people feel they have. There is currently a volunteer Marshallese translation hotline to help them communicate, but there is not always someone available to answer the line when needed.

Conclusions from Community Outreach

There are several conclusions from our discussions with both the Marshallese and Hispanic communities in Benton and Washington counties in NW Arkansas. The first is that people are worried about their families and their communities. However, people are not consistently using the prevention measures and people are not receiving the information they need to prevent infection and spread.

Reasons why people in the community are not getting the information they need to prevent COVID-19 infection and spread include:

1. There are many key stakeholders that are working to support both communities (ADH, local medical providers, community-based organizations, business community, cultural leaders, faith communities, school systems, and social groups); however, this work is not always

coordinated. These groups should work together to increase the coordination of COVID-19 programs.

   a. In particular, people need more
      i. awareness about the modes of transmission of COVID-19,
      ii. awareness about COVID-19 *risk* including factors that increase risk,
      iii. awareness about *how* specific prevention behaviors decrease risk,
      iv. acceptance of testing, and
      v. awareness of when to seek emergency care.

2. Messaging needs to come from local sources (people they know), in a variety of ways, and repeatedly. Messaging should include methods that don't rely on literacy, with an emphasis on social media campaigns (especially Facebook and Facebook Live), short videos, and radio.
3. Social, cultural, health, and well-being needs, and concerns of the communities should be considered. Specifically, address discrepancies between ADH reported Marshallese COVID-19 deaths and the community tally by providing education on the death reporting process and explanation of possible discrepancies between preliminary coroner list and ADH reports.

Section F: Recommendations

Currently, there is widespread community transmission of COVID-19 among the Hispanic and Marshallese populations in Benton and Washington counties. The findings suggest that occupational, particularly poultry processing facility workers, household, and community interactions are likely contributing to propagating the virus.

Assessment of COVID-19 transmission, prevention and control in poultry processing facilities was beyond the objectives of this mission; however, the epidemiologic, network and community data indicate that prevention, testing and contact tracing in poultry processing facilities as well as at community locations, will be critical to slow the spread of COVID-19 among Hispanic and Marshallese populations in Benton and Washington counties. Poultry processing facilities are a component of the critical infrastructure within the Food and Agriculture Sector, therefore, poultry processing facilities should develop plans for continuing operations in the setting of COVID-19 occurring among workers or in the surrounding community and (1) work directly with state and local public health officials and occupational safety and health professionals; (2) incorporate relevant aspects of CDC guidance, including but not limited to the Interim Guidance from CDC and the Occupational Safety and Health Administration (OSHA) and the CDC's Critical Infrastructure Guidance; and (3) incorporate guidance from other authoritative sources or regulatory bodies as needed.

Rapid control of the spread of COVID-19 will minimize morbidity, mortality, and the social and economic impact in Benton and Washington counties in NW Arkansas. To accomplish this goal the CDC provides specific recommendations in 5 general focus areas including:

1. Enhance targeted COVID-19 testing
2. Enhance case investigation and contact tracing
3. Tailor COVID-19 prevention communication and education for Hispanic and Marshallese communities
4. Improve coordination of efforts related to COVID-19 control
5. Enhance data collection, analysis and reporting for COVID-19

Discussion of recommendations

Enhance targeted COVID-19 testing:

- Use data driven approaches to prioritize testing to settings with the highest burden of COVID-19 (e.g., workplaces, multifamily dwellings).
- Consider serial testing at 5 to 7 days intervals in high-burden settings to identify new infections in previously untested persons and those with negative results previously.
- Household contacts should be tested as soon as possible after recognition of exposure regardless of the setting. In-home specimen collection at the first encounter is encouraged to expedite testing.
- Because household transmission is common and in-home quarantine can be challenging among Hispanic and Marshallese populations, consider serial testing at 5 to 7-day intervals for household contacts who previously tested negative until 14 days after the end of their last household exposure.
- To facilitate participation in testing, include bilingual Marshallese or Spanish staff in teams collecting specimens for COVID-19 testing from these populations, and increase the number of teams serving these populations. Bilingual staff should inform clients about how the test is performed, what to do while waiting on test results, what to tell employers, how to get test results, what should be done if the results are negative, and what should be done if results are positive. This information should be provided in the preferred language of Marshallese and Hispanic communities.

- Increase laboratory capacity for SARS-CoV-2 testing to include building local capacity to address increasing local demand for rapid testing.
- Ensure timely reporting of test results to clients and that the results are accompanied by appropriate instructions and linkage to care and services. Instructions should reiterate information provided when specimens were collected and should be provided in the preferred language of Marshallese and Hispanic communities. To maximize the efficiency of other control efforts, >90% of positive results should be reported to clients within 24 hrs. of specimen collection.
- Monitor time to complete critical testing processes including time to specimen collection after source notification; time from specimen collection to laboratory delivery and reporting to the ADH; and time from specimen collection until results are reported to clients.
- Consider the detailed targeted testing proposal included in Appendix 4.

Enhance case investigations and contact tracing:

- Prioritize contact tracing and case investigation for high occupancy households and facilities.
- Include bilingual Marshallese or Spanish staff in teams conducting case investigations and contact tracing involving these populations and increase the number of teams serving these populations. Bilingual staff should explain isolation and quarantine recommendations, inform clients about available support and services, and should be the point of contact for future interactions related to COVID-19. The use of bilingual staff should promote trust and increase compliance with recommendations.
- Work with the community leaders to identify culturally acceptable methods and locations to isolate cases who are unable to effectively isolate within their own home. This might include arrangements for co-hosting with other cases who are members of the same family or community and willing to stay together.
- Increase access to support and services for Marshallese and Hispanic clients possibly through collaboration with other local organizations. The support may be essential for some clients to follow quarantine or isolation recommendations. Support might include assistance with rent, food, and healthcare. Where such services already exist, increase case-management staffing to support patients through the process and identify gaps.
- Increase communication and coordination with local employers to expedite case identification, contact tracing and contact tracing to support employees and their families during quarantine and isolation. Support for family income should be provided for the period of isolation or quarantine.

Tailor communication and education for Hispanic and Marshallese communities:

- A detailed communication plan is included in appendix 5. The goal of this plan is to encourage individual and community buy-in and adoption of prevention methods in order to prevent the spread of disease and to support longer term behavior change.
- Coordinate with community partners to provide targeted communication and education (multiple sources, in a variety of formats, and repeatedly).
- Incorporate methods that don't rely on literacy, with an emphasis on social media campaigns (especially Facebook and Facebook Live), short videos, and radio.
- Specific educational needs include 1) increasing awareness about the modes of transmission of COVID-19, 2) increasing awareness about COVID-19 *risk* including factors that increase risk, 3) increasing awareness about *how* specific prevention behaviors decrease risk, 4) increasing acceptance of testing, and 5) increasing awareness of when to seek emergency care.
- Consider the social, cultural, health, and well-being needs and concerns of the communities. Specifically, address discrepancies between ADH reported Marshallese COVID-19 deaths and data collected by the community:

- Providing education on the death reporting process and possible discrepancies between preliminary coroner list and official ADH reports.

Improve coordination of COVID-19 prevention and control efforts:

- Coordinate a multisector and multiagency plan that organizes and converges efforts to slow the spread of COVID-19 and reduce health, social and economic barriers.
- Coordinate educational efforts to ensure that enough medical interpreters and bilingual care coordinators are available to address the needs of Marshallese and Hispanic patients.
- Enhance collaboration and communication between employers, particularly with poultry processing facilities, and ADH on testing, case investigation, and contact tracing. Encourage employers to implement policies that support COVID-19 prevention and mitigation efforts.
- Coordinate efforts of medical care providers and ADH to allow rapid exchange of information, prioritized testing for symptomatic persons, appropriate placement of patients with suspected or confirmed COVID-19, and ongoing investigation of cases and contacts. Ensure that resources for healthcare are available, affordable, and appropriately used by Hispanic and Marshallese communities.
- Engage Marshallese and Spanish speakers as care coordinators who assist clients access medical care and wrap around services.
- Encourage providers of wrap around services to coordinate their efforts so that gaps in services are addressed and avoided.
- Foster collaborations between health care providers and the Marshallese and Hispanic communities that reduce cultural barriers and increase utilization of health care services. For example, use of trusted bilingual liaisons to communicate and support connections with families while patients are isolated in the hospital would promote the development of trusted relationships.

Enhance data collection, analysis and reporting:

- Reduce missing data by prioritizing the collection of key variables (e.g., race/ethnicity, address, employment, comorbidities, possible contacts/exposures). Collecting race/ethnicity data of tested individual is important to understand testing allocation and to interpret increases in testing.
- Ensure paper-based contact tracing data is transferred to electronic reporting systems; explore methods of electronic data collection.
- Reduce duplication of data collection efforts for COVID-19 and streamline data cleaning processes.
- Inform COVID-19 trends to Hispanic and Marshallese communities
- Provide standard scripts for consistent collection of data from Spanish and Marshallese populations.

Section G: Appendices

- *Appendix 1: Hospitalization and death multivariate analysis tables*
- *Appendix 2: Printed materials provided during site visits*
- *Appendix 3: Focus group questions*
- *Appendix 4: Targeted serial COVID-19 testing proposal*
- *Appendix 5: COVID-19 Prevention communication plan*
- *Appendix 6: Training Proposal for ADH Staff – Protecting workers against COVID-19*
- *Appendix 7: CDC/ADH Team members*

Appendix 1. Hospitalization and death multivariate analysis tables

Multivariate Logistic Regression Model showing associations of select variables[1] with hospitalization[2]
Items in red are statistically significant

Variable	No participants hospitalized/ not hospitalized (%)	Odds Ratio (95% CI)
Age Group		
Under 25 yrs.	10/682 (1.4%)	Reference
25 to 34 yrs.	17/431 (3.8%)	2.51 (1.11 to 5.64)
35 to 44 yrs.	32/382 (7.7%)	6.12 (2.91 to 12.85)
45 to 54 yrs.	38/348 (9.8%)	9 (4.28 to 18.94)
55 to 64 yrs.	37/207 (15.2%)	14.1 (6.55 to 30.34)
65 yrs. & older	47/97 (32.6%)	34.87 (16.09 to 75.54)
Sex & Pregnancy		
Female, Not pregnant	80/1098 (6.8%)	Reference
Female, Pregnant	8/27 (22.9%)	13.58 (5.37 to 34.37)
Male or Transgender	93/1042 (8.2%)	1.29 (0.92 to 1.81)
Race & Ethnicity		
Hispanic or Latinx	75/1337 (5.3%)	Reference
native Hawaiian or Pacific Islander (Marshallese)	58/361 (13.8%)	4.00 (2.68 to 5.96)
All other & unknown	48/469 (9.3%)	1.42 (0.94 to 2.15)
Diabetes		
No	131/1970 (6.2%)	Reference
Yes	50/197 (20.2%)	1.76 (1.17 to 2.65)
Chronic Cardiac Disease		
No	167/2136 (7.3%)	Reference
Yes	14/31 (31.1%)	2.14 (1.01 to 4.52)
Immunocompromised		
No	177/2161 (7.6%)	Reference
Yes	4/6 (40%)	3.37 (0.83 to 13.68)

[1] Variables were selected from Age Group, Sex & Pregnancy, Race & Ethnicity, Diabetes, Chronic Cardiac Disease, Hypertension, Chronic Lung Disease, Chronic Kidney Disease, Chronic Liver Disease, Immunosuppressed, and Cancer by Wald backward selection.

[2] Hospitalization status is known for 2,348 people, and unknown for 1,088 people.

CONCLUSIONS: Among persons with RT-PCR confirmed COVID-19 in NW Arkansas, age and race/ethnicity are strongly associated with hospitalization after controlling for comorbidities and pregnancy. The odds of hospitalization for native Hawaiian or Pacific Islanders (almost all of whom were Marshallese) are significantly higher than for other racial and ethnic groups.

Multivariate Logistic Regression Model showing associations of selected variables[1] with death[2]

Variable	Number of participants who died/who did not die (%)	Odds Ratio (95% CI)
Age Group		
Under 45 yrs.	5/1319 (0.4%)	Reference
45 to 54 yrs.	2/326 (0.6%)	2.29 (0.4 to 12.99)
55 to 64 yrs.	5/200 (2.4%)	10.69 (2.66 to 43.00)
65 yrs. & older	9/106 (7.8%)	31.11 (8.45 to 114.57)
Sex & Pregnancy		
Female, not pregnant	8/988 (0.8%)	Reference
Female, pregnant	1/30 (3.2%)	16.27 (1.54 to 172.06)
Male or transgender	12/947 (1.3%)	2.06 (0.78 to 5.43)
Race & Ethnicity		
Hispanic or Latinx	2/1215 (0.2%)	Reference
native Hawaiian or Pacific Islander (Marshallese)	9/319 (2.7%)	25.12 (5.11 to 123.44)
All other & unknown	10/431 (2.3%)	9.47 (2.01 to 44.55)
Chronic Kidney Disease		
No	19/1955 (1%)	Reference
Yes	2/10 (16.7%)	6.02 (0.95 to 38.34)

[1] Variables were selected from Age Group, Sex & Pregnancy, Race & Ethnicity, Diabetes, Chronic Cardiac Disease, Hypertension, Chronic Lung Disease, Chronic Kidney Disease, Chronic Liver Disease, Immunosuppressed, and Cancer by Wald backward selection.
[2] Death status is known for 1,986 people and unknown for 1,450.

CONCLUSIONS: Among persons with RT-PCR confirmed COVID-19 in NW Arkansas, age and race/ethnicity are strongly associate with death after controlling for comorbidities and pregnancy. The odds of death for Hispanic/Latinx persons are significantly less than other racial and ethnic groups. The odds of death for native Hawaiian or Pacific Islander (almost all of whom were Marshallese) are significantly higher than other racial and ethnic groups (e.g., 25 times higher than among Hispanic persons). Pregnancy appears to be significantly associated with death (occurring in 1 of 30 pregnant women reported).
Limitations in the analysis include the small sample size with few deaths (n=21 as of 6/13/2020), the relatively large number records with missing information regarding death (42%) and the lack of data regarding potentially-confounding comorbidities such as obesity.

Appendix 2. Printed Materials Provided During Site Visits

Door Signs

Spanish

- Cloth covering door sign: https://www.cdc.gov/coronavirus/2019-ncov/downloads/cloth-face-covering-building-entrance-sp.pdf
- COVID-19 symptoms door sign: https://www.cdc.gov/coronavirus/2019-ncov/downloads/COVID19-symptoms-sp.pdf
- Stop – stay home door sign: https://www.cdc.gov/coronavirus/2019-ncov/downloads/316129-A-StayHomeFromWork_ESP.pdf

Marshallese

- Cloth covering door sign: (only English link currently available) https://www.cdc.gov/coronavirus/2019-ncov/downloads/cloth-face-covering-building-entrance.pdf
- COVID-19 Symptoms door sign: https://www.cdc.gov/coronavirus/2019-ncov/downloads/COVID19-symptoms-Marshallese.pdf
- Stop – stay home door sign: (only English link currently available) https://www.cdc.gov/coronavirus/2019-ncov/downloads/StayHomeFromWork_Horizontal.pdf

Fact Sheets

Spanish

- What you should know about COVID-19 to protect yourself and family: https://www.cdc.gov/coronavirus/2019-ncov/downloads/2019-ncov-factsheet-sp.pdf
- Stop the spread: https://www.cdc.gov/coronavirus/2019-ncov/downloads/stop-the-spread-of-germs-sp.pdf
- Guidance for extended family households: https://www.cdc.gov/coronavirus/2019-ncov/downloads/COVID19_FamilyGuidance_ESP.pdf
- What to do if you are sick: https://www.cdc.gov/coronavirus/2019-ncov/downloads/sick-with-2019-nCoV-fact-sheet-sp.pdf
- 10 things you can do to manage your COVID-19 symptoms at home: https://www.cdc.gov/coronavirus/2019-ncov/downloads/10Things-spanish.pdf

Marshallese

- What you should know about COVID-19 to protect yourself and family: https://www.cdc.gov/coronavirus/2019-ncov/downloads/2019-ncov-factsheet-Marshallese.pdf
- Stop the spread: https://www.cdc.gov/coronavirus/2019-ncov/downloads/stop-the-spread-of-germs-marshallese.pdf
- How to protect yourself at home: https://www.cdc.gov/coronavirus/2019-ncov/downloads/FS_HowToProtectYourself_MH_Marshallese.pdf
- Isolation vs quarantine: *(only English link currently available) https://www.cdc.gov/coronavirus/2019-ncov/downloads/StayHomeFromWork_Horizontal.pdf* –
- 10 things you can do to manage your COVID-19 symptoms at home: (only English link currently available) https://www.cdc.gov/coronavirus/2019-ncov/downloads/10Things.pdf

Appendix 3. Focus Group Questions

PRA/NRD Approved-06.23.20

Consent

Good morning/afternoon, thank you for taking the time to talk with us today. This discussion should take about 60 to 90 minutes.

My name is [NAME] from the Centers of Disease Control and Prevention, or CDC. I am joined by my colleague [NAME] who will be taking notes during this focus group.

Our goal today is to learn more about your community here in NW Arkansas and to understand some of the things that make it easier or harder to keep you and your families safe from coronavirus.

We will be using what you tell us today to help the Arkansas Department of Health and local leaders understand how to help your community.

We are here to listen to you. You are the experts on your community, and there's no wrong answers but rather differing points of view. Please share your point of view even if it differs from what others have said.

We will take notes, because we know you all have important information to share and we don't want to miss that, but we are not writing down names.

Your participation here today is completely voluntary. You can choose not to respond to at any time.
If you agree to participate, please say yes.

Questions for Youth Marshallese & Hispanic/Latinx

1. What are your main concerns about coronavirus?
2. Has coronavirus had an impact on how you socialize with your friends and social circles?
    a. Has it had an impact on your family?
3. What have you heard about preventing the spread coronavirus?
    a. Where do you and your friends get your information?
    b. Where does your family get their information?
4. What do you think is causing people in your community to get coronavirus?
    a. [PROBE: what kind of social gathering activities are people in your community doing]
5. What are some things you can do to help stop the spread in your community?
    a. [PROBE: social media campaigns, tik tok videos, mask decorating challenge, door to door education, etc.]
6. What are some ideas you have to encourage your friends and family to help stop the spread in the community?
    a. How can it be more "fun"?
7. What should we keep in mind when developing or sharing information about coronavirus for you and your family?
    a. **[PROBE: resources available to the community, the education and literacy level of the community, access and use of social media, who they trust the most**]
8. Are there questions about coronavirus that you need answers to?

Questions for Adult Marshallese & Hispanic/Latinx

1. What are your main concerns about coronavirus?

2. What do you think is causing people in your community to get coronavirus?
3. What are things people in your community are doing to protect themselves from coronavirus?
    a. What seem to be their main concerns or objections?
    b. What would make it easier?
4. What kind of social or gathering activities are people in your community doing?
    a. [PROBE: going church? Attending family events like parties, picnics, etc.? Going shopping?]
5. If you were told you tested positive for coronavirus, would you be able to stay home?
    a. Would you be able to isolate yourself from family members?
    b. Would you be more likely to wear a mask outside?
    c. What could make it easier?
6. What would make you decide to get tested for coronavirus?
    a. Do you know where to go to get tested?
    b. Is it easy to get to a testing location?
    c. What would make it easier?
7. What do you think needs to happen to stop the spread within the community?
    a. [PROBE: Are there additional resources you or your community needs? How can community leaders help?]
8. Do you know of someone who had a member of their household who had or thought they had coronavirus, what did they do?
    a. [PROBE: did they stay home, did they try to isolate, did they get tested?]
9. What information do you receive about coronavirus from work?
    a. What actions has your employer taken to protect you and your coworkers?
    b. [PROBE: from supervisors, verbally or through social media, videos, flyers, pamphlets, text messages]
10. What additional things do you need to protect yourself from coronavirus at work?
    a. [PROBE: need for more translation and materials, resources, PPE, etc.]
11. What actions have community leaders taken to help you are your family?
    a. What else would you like to see?
12. What should we keep in mind when developing or sharing information about coronavirus for you and your family?
    a. **[PROBE: resources available to the community, the education and literacy level of the community, access and use of social media, who they trust the most**]
13. Are there questions about coronavirus that you need answers to?

Religious Leadership Questions for Marshallese

1. We've heard from the community that you are all worried and that people have been following the guidance for protecting themselves and their families from coronavirus (wearing masks, not gathering). As leaders in the community,
    a. What do you think is working?
    b. What's not working?
2. What do you think needs to happen to stop COVID in the Marshallese community?
    a. Is there information you think your community needs to know?
    b. Are there things that you think your community needs?
3. What are you worried will happen to the Marshallese if nothing is done to stop COVID?

Appendix 4. Targeted testing proposal

Targeted Serial Testing for SARS-CoV-2

Background:

SARS-CoV-2, the virus that causes COVID-19, is primarily spread from person to person through respiratory droplets. Transmission is facilitated by close proximity and longer exposure time. Members of large households living in close quarters are especially vulnerable and are among the highest priority for contact investigation and testing.

Investigation of COVID-19 outbreaks has revealed that 20 to 50% of those testing positive for SARS-CoV-2 by RT-PCR are asymptomatic or pre-symptomatic.[1] Testing is important in identifying such individuals, as they may not know they are infected and inadvertently spread the virus. These individuals may be more willing to comply with isolation and quarantine measures if aware of their infection. Case detection among contacts in conjunction with effective isolation can prevent disease transmission and subsequent outbreaks [2 - 4].

Shedding by asymptomatic or pre-symptomatic persons can result in additional cases and amplify outbreaks of COVID-19.[5] Prompt and effective contact tracing with SARS-CoV-2 testing can identify additional cases and deter spread.[6] On June 13, 2020, CDC recommended testing for all close contacts (including those without symptoms) and consideration of broader testing strategies, including the option of widespread and weekly testing of asymptomatic persons, to control transmission in special high-risk settings that have potential for rapid and widespread dissemination of SARS-CoV-2 infection.[7] Contact investigation with testing is among the most efficient and highest yielding actives for identifying cases. Serial testing at <=7-day intervals can identify infected contacts who were not shedding virus when previously tested. The additional yield and impact of serial testing on COVID-19 control depends on the situation, interval between testing, and the extent of ongoing transmission. Serial testing offers the greatest benefit in situations where quarantine is impractical or ineffective (e.g., large households, correctional facilities, nursing homes and homeless shelters).

Recent evidence indicates that there may be significant and ongoing transmission of SARS-CoV-2 among Latinx and Marshallese communities in Benton and Washington counties despite efforts to quarantine close contacts. This analysis identified >20 residential complexes with particularly high burdens of RT-PCR confirmed COVID-19 (>7 cases/complex). There is concern that COVID-19 has spread from and among essential workers in poultry processing facilities, their families, and marginalized communities. Hispanic and Marshallese communities in NW Arkansas live in multi-generational homes, have collectivist cultural norms and limited social safety net to allow for abstention from paid work, these factors may pose challenges to compliance with quarantine and isolation measures.

Targeted serial testing directed at high-burden residential complexes and serial testing of household contacts regardless of facility burden can identify additional cases and inform efforts to further curtail the spread of COVID-19.

Premises:

- Arkansas Department of Health already recommends testing of close contacts but the proportion of contacts who complete testing and the proportion with positive test results are not documented.

- Serial testing of household contacts will identify infected persons who were not shedding virus when previously tested, and the additional yield (percent positive) will exceed the yield from less targeted testing and offset the cost of the additional testing.
- Serial testing in areas with a high density of cases may be effective in stopping transmission in geographically circumscribed areas.
- Knowledge of positive test status may increase compliance with isolation measures by individuals and employers.
- Knowledge of positive test status will promote broader contact investigation, identification of more cases, and faster control of the COVID-19 epidemic.

Proposal for targeted serial testing

1- Identify apartment and residential complexes that have the highest burden of RT-PCR confirmed COVID-19 in Benton County and Washington County, Arkansas in the prior 2 weeks.
2- Offer information about COVID-19 to residents of the apartment complexes identified in Step-1 and encourage residents to have RT-PCR testing for SARS-CoV-2.
3- Residents with positive results are considered to have newly diagnosed RT-PCR confirmed COVID-19 and will have case investigations and contact tracings initiated.
4- If the positivity rate from initial testing is higher than a pre-determined threshold (to be determined), testing in the same site will be repeated in 5 to 7 days. Testing of previously untested residents and residents with previously negative results will be strongly encouraged. Testing will be repeated every 5 to 7 days until the proportion of positive results falls below the threshold. Time periods for specimen collections will include some after-hour and weekend collections to maximize participation.
5- Household contacts will be tested as soon as possible after recognition of exposure regardless of facility testing and may include households that are not in high-burden complexes. Those with negative results are encouraged to have repeat testing at <=7-day intervals until 14 days after the end of exposure (and if residing at a high-burden facility, the facility rate is below the threshold).
6- Contacts with positive test results are considered to have newly diagnosed RT-PCR confirmed COVID-19 and will have case investigations and contact tracings initiated.
7- Case investigation and contact tracing will follow regular procedures outlined by ADH with additional serial testing as described in this proposal (i.e., repeat testing of household contacts who previously tested negative at <=7 day intervals until 14 days after the end of exposure; and repeat testing at high-burden residential complexes at 5 to7 day intervals until the proportion of positive results falls below a predetermined threshold).
8- When possible, self-collected nasal turbinate swab specimens will be collected for SARS-CoV-2 RT-PCR under the direction of trained healthcare workers. The specimens will be transported to a designated laboratory that can provide results for >90% of specimens within 24 hours of collection.
9- Positive test results will be provided to the client as soon as possible and preferable within 24 hrs. of specimen collection. Notification will be accompanied by initiation of case investigation and contact tracing.
10- Negative test results will be provided to the client as soon as possible and preferable within 48 hrs. of specimen collection.
11- Educational efforts at each encounter will reinforce the use of masks and social distancing, encourage quarantine for contacts, and promote isolation for cases.
12- Develop metrics for demonstrating quality improvements in identifying cases, targeting testing, reporting of test results, and connecting clients to social services. Metrics could report the

number of people tested and the percentage with positive results with each round of testing at high-burden facilities; or the number of household contacts identified, tested, and notified of results within 2 and 5 days of case notification.

Outcomes

- Identify new cases in sites where high levels of transmission have been recently documented.
- Verify whether targeted serial testing may be an effective mitigation strategy for community-based outbreaks where quarantine may be ineffective.
- Metrics for assessing quality of testing, case identification, investigation and contract tracking.

Staffing and logistics

- Staff for health education at the time of initial testing at high-burden facilities will be provided by AHD and UAMS Northwest Campus.
- Staff for specimen collection will be provided by the Arkansas Department of Health and NW Arkansas Coalition clinical partners.
- RT-PCR will be performed by contact laboratories with funding provided through CDC.
- Case investigations and contract tracing will could perform by AHD.
- Data entry and assessment will be performed by AHD, UAMS Northwest Campus, and CDC staff.

References

1. Arons MM, Hatfield KM, Reddy SC, et al.; Public Health–Seattle and King County; CDC COVID-19 Investigation Team. Presymptomatic SARS-CoV-2 infections and transmission in a skilled nursing facility. N Engl J Med 2020;382:2081–90.
2. Treibel, T.A., et al., COVID-19: PCR screening of asymptomatic health-care workers at London hospital. The Lancet, 2020. **395**(10237): p. 1608-1610.
3. Dora, A.V., et al., Universal and Serial Laboratory Testing for SARS-CoV-2 at a Long-Term Care Skilled Nursing Facility for Veterans – Los Angeles, California, 2020. MMWR Morb Mortal Wkly Rep, 2020. **69**(21): p. 651-655. At: https://www.cdc.gov/mmwr/volumes/69/wr/mm6921e1.htm
4. Moriarty, L.F., et al., Public Health Responses to COVID-19 Outbreaks on Cruise Ships – Worldwide, February-March 2020. MMWR Morb Mortal Wkly Rep, 2020. **69**(12): p. 347-352.
5. He, X., et al., Temporal dynamics in viral shedding and transmissibility of COVID-19. Nat Med, 2020.
6. Njuguna H, Wallace M, Simonson S, et al. Serial Laboratory Testing for SARS-CoV-2 Infection Among Incarcerated and Detained Persons in a Correctional and Detention Facility — Louisiana, April–May 2020. MMWR Morb Mortal Wkly Rep. ePub: 29 June 2020. DOI: http://dx.doi.org/10.15585/mmwr.mm6926e2external icon.
7. CDC. Overview of testing for SARS-CoV-2. 2020. Atlanta, GA: US Department of Health and Human Services, CDC; 2020. https://www.cdc.gov/coronavirus/2019-ncov/hcp/testing-overview.html

Appendix 5. COVID-19 Prevention communication plan

NW Arkansas COVID-19 Prevention Communication Plan

Overview

This plan is designed to provide the Arkansas Health Department, community organizations, and partners the tools needed to present a coherent and unified messaging strategy to effectively reach community members in Benton and Washington Counties to assist in stopping the rapid spread of COVID-19.

It specifically focuses on two populations, Latinx and Marshallese, who have been most heavily affected by the disease so far, in the hopes of reaching them with effective, motivational messages to encourage behaviors that will help to protect them and their families.

Given that both of these populations experience a great deal of disenfranchisement, economic instability, stigma, and discrimination generally, it is important to ensure that these communication strategies do not come across as accusatory, stigmatizing or blaming. **Instead, they should be empowering and inspirational, making sure everyone feels included and like they can be a part of the solution.**

Ideally, the actual messages will be crafted by local community members and shared through their own local channels. Wherever possible, encourage local stakeholders, influencers and advocates to make their own videos, memes, and digital content to share.

Strong efforts should be made to ensure that community members feel empowered to act and to have the resources and tools needed to be active members in the recovery effort in their community.

Given the current level of COVID-19 spread in the communities, transmission could occur at work or between members of a household, there is also a subset of messaging in this plan specifically focused on reaching employers and businesses to gain buy-in and to encourage their involvement as well.

This plan could be split up to be given out to local community thought leaders, youth advocates, influencers and stakeholders. If you decide to do that, share with them the last 2 sections: *Messaging Strategies and Guidance* and *What Can I Do?*

A list of all the partners and community members identified who want to help with the COVID-19 response is available in a supplementary document. We recommend providing a Google Drive link that can be used as a clearinghouse for partners to share any and all content they develop or find to make it easier for everyone to share resources. Share the link broadly to collect as much content as possible to be shared out with as many people as possible.

Communication objectives

- To increase awareness about the modes of transmission of COVID-19 and the risks of rapid transmission faced in small communities.
- To encourage prevention behaviors including social (physical) distancing, mask wearing, hand washing, cleaning and disinfecting and avoiding close contact if someone is sick, including household members. In addition, it is important to keep distance from people who are at higher risk of getting sick.

- To encourage testing, and acceptance for testing and subsequent results without placing blame on people if they test positive, and to provide resources for testing and for those who become sick.
- To encourage community buy-in and local support for community level action to prevent the spread of disease and to support longer term behavior change, including promotion of messaging and prevention best practices by employers, business owners, community advocacy groups, health departments and other stakeholders.

Audiences:

It is important to try to segment audiences as much as possible into as similar groups as possible because similar groups share common barriers, facilitators, interests, motivations, beliefs, and influences. By effectively segmenting messages by group, there is a better chance that the intended message will reach the intended audience in the way it was intended and will motivate them to action more effectively.

Based on the feedback from the focus groups and site visits, there are at least 6 different audience sub-groups (and possibly more), that have been identified.

Latinx

Younger Latinx (YLX)- those under 25-30 who speak English are trying to assimilate into mainstream culture, this group can serve as cultural brokers.

Adult Latinx (ALX)- those over 30 who are more likely to work in poultry processing facilities and may or may not speak English fluently.

Elder Latinx (ELX)- those over 55 who probably do not speak much, if any English, and rely on their family to support them, and who are at a higher risk of more severe COVID-19 cases if they get the virus.

Marshallese

Younger Marshallese (YMS)- those under 30 who speak English and are trying to assimilate, and are also more likely to mingle with those outside the Marshallese community, possibly with Latinx youth or others in the broader community, and may be able to be cultural brokers.

Adult Marshallese (AMS)- those in their 30s-50s who probably speak some English, may not have high literacy levels, likely work in the plants and are the main providers in their household.

Elder Marshallese (EMS)- those over 55 who may not speak English, may not have high literacy levels, and are less assimilated, but also may be the respected elders, and who are at a higher risk of more severe COVID-19 cases if they get the virus.

Poultry processing facilities/Businesses/Other Employers:

While this includes small local businesses, the message focus will likely be aimed at larger employers, such as Walmart and the poultry processing facilities since they have real capacity to influence social norms in the community. They can set good examples by encouraging people to follow CDC guidance, and as private businesses can go as far as they want in terms of enforcement, so ideally will mandate things like masks for customers and ways to maintain physical distance at workstations and in break areas.

Audience barriers and facilitators

It is important to understand the barriers and facilitators that different segments of audiences face if you want to reach people effectively because you can make recommendations all day long, but if people can't meet the recommendations they won't. Similarly, if they don't think that an activity is going to be beneficial to them, they won't do it, so it is important to figure out what motivators or facilitators they have that you can draw on to help move them. We need to help facilitate prevention behaviors in their routine activities such as carpooling, grocery shopping, and attending church.

Marshallese:

Barriers:

- Language (for the older group)
- Mistrust of all official systems, especially medical
- Confusion about "social distance" vs. "physical distance"
- Confusion about "family" vs. "household"
- Cultural practices that make recommendations hard to follow:
    - Funerals and large gatherings are common
    - Large intergenerational families living together (up to 20 in a house)
    - Preference for herbal remedies/prayer healing over institutionalized medicine
- Cannot afford not to work, so people are going to work even if they have symptoms or have been tested but don't have test results back because employers aren't providing full paid leave consistently (or if they are, employees don't know/think they are)
- Lack of access to medical system- unaffordable to many and not eligible for Medicaid or any other relief if sick
- Limited knowledge of medical systems and procedures
- Confusion about testing processes, getting results and quarantine May be reluctant to ask questions
- Many may only use prevention methods if it is required or mandated by authorities

Facilitators:

- Strong, tight knit network with extreme deference for elders
    - If we can convince those trusted leaders to come along, the others will listen
- Strong sense of family/community pride
- Will listen to authorities in the Marshallese community
- Have a MS COVID Task Force
- Strong desire to return to home in Marshall Islands some day
- Strong desire to protect the elders and their culture
- Younger MS have strong desire to assimilate into US mainstream culture
- Younger MS want to help and be a part of supporting their community
- Have strong leadership in the community: Consulate, COVID Task Force, Dr. Riklon and others
- ***Will listen to CDC as authorities- so if people are told that these are the rules from CDC they will be more likely to follow them***

Latinx:

Barriers:

- Language (for some or most?)
- Tight living quarters, many living together, sometimes family, sometimes not
- Culture of having big gatherings, church, family celebrations and so on
- Fear of stigma and discrimination if they test positive
- Preference for curanderos and herbal/prayer remedies over institutionalized medicine
- Cannot afford not to work, so people are going to work even if they have symptoms or have been tested but don't have test results back because employers aren't providing full paid leave consistently (or if they are, employees don't know/think they are)
- No centralized leadership- although did just form a regional LX COVID Task Force
- Feeling stigmatized by own community as well as outside community if test positive, stigma around getting tested and on asking for help if test positive

Facilitators:

- Strong, tightknit community
- Good organizing- and now have a LX COVID Task Force
- Strong community/family values
- Ability to reach state legislators and get grants/funding as needed
- Larger community, so more local businesses and networks of support
- ***Will listen to authority- so if people are told that these are the rules from CDC they will be more likely to follow them***

Local businesses/employers

*We did not conduct any focus groups or interviews with the local poultry processing facilities, so cannot speak confidently to their farriers and facilitators, but assume they are experiencing some of these similar challenges to those of other local businesses.

Barriers:

- Feel like they are being blamed
- Cost of enforcing prevention measures
- Limited ability to make changes outside of the workplace such as enforcing rules on carpooling or other things that would keep people safe
- Disconnect about what guidance should be for testing and waiting for test results for employees and quarantining
- Not able/willing to offer comprehensive sick leave to people who are waiting for test results or who test positive and need to stay home
- Employers lack COVID resources in Spanish or Marshallese

Facilitators:

- Capacity to reach large groups of the population
- Ability to show that they care and are doing right by their employees
- Desire to have healthy, productive workers to be able to continue to operate
- Ability to mandate changes throughout their business including requiring all employees and customers to wear masks
- ***Note: Poultry processing facilities and other major employers can provide opportunity for prevention, testing, screening and messaging to reinforce prevention***

Channels, Strategies, and Timing

The goal should be to find as many channels as possible, and to have as broad and deep a reach as possible in a concentrated effort. We want to use the key messages and use targeted approaches to reach the various sub-groups across as many various channels as possible as quickly as possible.

Messages are most effective when they are broadcast simultaneously from various sources in rapid succession. Ideally all partners will be working together to broadcast these same messages across every channel at their disposal heavily over the next 6-10 weeks.

Booster messaging is recommended every few months following until a vaccine or alternative therapies become available given that people are likely to get lax in their prevention strategies once the cases are under control.

If you are going to use resources such as social media, Google, or mass media, you will want to have call to action for people to follow, in addition to a message, and ideally, you want to have a website or resource where you can be directing people to information. Generally, people may want to share content out on local sites rather than making people go hunting for government information, and in some communities, people are wary of federal government and trust local sources more. So, there are lots of options to feature CDC content on your own local website so that you have all the facts without having to generate the information yourself.

For more detail on CDC content syndication: https://tools.cdc.gov/medialibrary/index.aspx#/results

These channels will be most effective if the messages are shared via local influencers wherever possible, whether those influencers are spreading the information by word of mouth or via their digital platforms. See Appendix A for influencers already identified.

Facebook:

- Community subgroups should be the first source of spreading messages via Facebook as people are more likely to see these messages and engage with the positively. They are likely to be seen as credible sources of information.
- *Latinx*
    - https://www.facebook.com/ARimmigrants/ (Arkansas United)
    - https://www.facebook.com/univision.arkansas/ (Arkansas Univision)
    - https://www.facebook.com/StRaphaelNWA (Major Latinx church)
    - https://www.facebook.com/HIJOSDELAMAZORKA/ (radio)
    - https://www.facebook.com/lazetaarkansas (radio)

- *Marshallese*
    - https://www.facebook.com/ArkanasasCoalitionofMarshallese/ (Arkansas coalition of Marshallese)
    - https://www.facebook.com/MEInonprofit/ (Marshallese education institute)
    - https://www.facebook.com/rmiconsulatearkansas/ (RMI consulate)
    - https://www.facebook.com/MarshalleseBeLike/ (social influencer)
    - https://www.facebook.com/KNDIRADIO1270AM (Hawaiian radio station)

- See if community members want to post FB live videos or host FB live events on these channels to walk people through various activities such as:
    - What the testing process is like, what happens after you get tested, where to call for your results etc.
    - How to carpool to work following guidance on number of occupants and wearing masks
    - How to isolate from the rest of the household at home if someone in the household has tested positive
    - Hosting virtual gatherings with family and friends to show how fun/easy it can be
    - Following the prevention guidance when at work/out shopping/at restaurants etc.
    - Encouraging everyone to do their part, because we are all in this together!

- Consider doing paid advertising on FB through FB ads and boosted posts. Due to Facebook's algorithm, you are much more likely to reach people if you are not a member of their friends and family network if you use paid content.
    - Facebook allows quite a bit of targeting in their advertising platform by age, language, part of the country, interests and more, so this is an extremely effective way to reach people if they are on FB.
    - You can target FB groups as well, so can put messages out specifically focused on the groups you know your community members are part of
- It sounds like older people in both groups are active users on Facebook, so this would be the first and best channel to reach them. They especially mention getting their information from Facebook Live

WhatsApp:

- All groups:
    - WhatsApp groups will be ways to rapidly spread information, we can spread some key messages over those channels, preferably initiated and shared with the group by someone influential in the group

Instagram:

- Young LX and Young MS:
    - If young influencers in the community can be convinced to post content on IG it is a great way to reach them
    - Encourage them to make videos or memes of themselves modeling proper behavior, or telling personal stories about their experiences
- Should consider doing boosted posts and IG ads as well
    - IG also allows quite a bit of targeting in their advertising platform by age, language, part of the country, interests and more, so this is an extremely effective way to reach people if they are on IG
- It sounds like younger people in both groups are active users on Instagram, so this would be the first and best channel

Tik Tok:

- Young LX and Young MS:
    - Tik Tok is primarily a video social media platform where young people share content, so if you have young community influencers or groups of youth sharing out content, they

are likely already connecting and keeping each other informed, so it's another potential channel
    - Again, recommend videos that feature CDC information, but told in their own personal way
- This will require promotion direct from the people on the platform, so will require lots of engagement from local teens and 20 somethings

Google ad buying:

- Google has 3 different platforms where you can buy ad space and it allows for great hyper segmentation, with constant computer learning to improve targeting
    - Google search ads- where you can reach people as they search for specific terms with ads that will pop up (so, for example, if someone searches: COVID-19 in Arkansas, then your ad could come up with a message and link to a website or wherever you want to direct people)
    - Google display network- you buy ad space through google and provide them with the web-banner you want them to use, and the audience you are trying to reach and their computer learning will constantly refine it to get it in front of the audiences you are trying to reach.
    - YouTube ads- similar to the display network, if you provide Google with a video, or even a set of images that they can use to generate a video ad for you, they will place these video ads on YouTube based on the parameters you provide of the audience you are trying to reach.

Radio:

- Both MS and LX groups traditionally listen to radio a lot in their home countries, so if there are local stations that popular, we should try to get messages out
    - Spanish radio, La Zeta 95.7 FM, info@ezspanishmedia.com
- These messages could be PSA format if there is funding or they are willing to donate airtime. If so, CDC does already have some ads in both English and Spanish that might meet your needs, but it is always better to try to have locally recognized people in them if possible.
- Earned media through radio is also a great strategy.
    - See if local stations want to interview community members getting airtime on local programs.
    - A great strategy is to combine both a local health expert, say from the health department or local clinic who can speak to the medical/prevention needs, with a community member who can provide testimonial to their own experiences and activities doing as advised.

Univision Arkansas:

- If there are funds available through ADH or UAMS, a TV PSA would be great
- Earned media coverage would also be helpful, if there are any local community testing events happening, encourage local reporters to come and cover the event, explaining:
    - What the testing process is like, what happens after you get tested, where to call for your results etc.
    - Challenges people are facing with quarantining/staying home if sick
    - Hosting virtual gatherings with family and friends to show how fun/easy it can be
    - Following the prevention guidance when at work/out shopping/at restaurants etc.

        - Encouraging everyone to do their part, because we are all in this together!
- https://www.facebook.com/pg/univision.arkansas/posts/

Elder word of mouth:

- For the Marshallese population in particular, this is going to be key. Broader channels of dissemination are less likely to be effective with the older groups in the MS community, so identifying the key-elder decision makers and getting their buy in will be critical
    - To earn their buy in, some key message considerations might be:
        - We all want to be able to go home to the Marshall Islands someday, and the only way we will be able to is if we all stay healthy and safe. Right now, the islands are closed, they won't let us go home if we aren't healthy.
        - Older people are most at risk of getting really sick or dying, so if you want the traditions of your culture and the community you have built here to thrive, we need to keep everyone safe right now
        - We want to make sure your community is getting the support it needs. If people aren't getting tested, they aren't getting diagnosed with COVID-19, which means under counting of needs in terms of trying to argue for financial support, or even in terms of accurately counting deaths or knowing what the community is struggling with
        - YOU ARE NOT TO BLAME. Everyone, everywhere in the world is dealing with COVID-19, and we can't fight it without your help. We all must do our part to protect our families and communities and that starts with you.
    - Once buy-in has been achieved, make sure to provide them with all of the COVID basics, as they likely have not had a clear picture of how the disease is transmitted, what the best prevention strategies are or when someone should be tested or hospitalized

Local newsletters or newspapers:

- Local is better. These are usually extremely trusted sources by the community because local information is always more trusted than national/international
    - Chikin Melele- local Marshallese source
    - La Prensa Libre- local Latinx source
    - Daily Trumpet Newsletter- St. Rafael's Church
- Ad space would be good, specifically ads focusing on:
    - Reducing stigma
    - Making sure people know what numbers to call for testing results/connection to resources
    - When to seek care
- Also, great if you can do a human-interest piece, telling the story of a local community member's experience
    - These stories should focus on trying to address key barriers:
        - Such as someone explaining their fear of getting tested because of what would happen if they test positive and not wanting to disclose to friends and family
        - Someone explaining how they accessed the hotel system or other assistance benefits for those needing quarantine options

Flyers/posters:

- Design posters and flyers with as many pictures as possible so that people speaking any language can follow
    - Create bi-lingual Spanish and English content
    - Create bi-lingual Marshallese and English content
- Try to link posters with calls to action or decision prompts that fit with where they are being used- for example:
    - Hang posters about always wearing masks and staying 6 feet apart inside stores
    - Hang posters about washing hands thoroughly and staying 6 feet apart at worksites where people take breaks or eat lunch
    - Hang posters focused reducing stigma for getting tested everywhere so that it becomes normalized and people talk more openly about it
    - Play audio clips reminding people to wash hands and wear masks during break times
- Make sure to provide links to more information since you can only share so much information on a poster- if you can, try to use QR codes so that people can just scan with their phones to be directed to a website or FB page with more information
- Try to get these up in as many local businesses as possible
- Ask employers to post them in workplaces

SPLIT HERE if sharing with individual stakeholders and group organizations

FOR STAKEHOLDERS AND GROUP ORGANIZATIONS

Messaging Strategies and Guidance

Many of the people we are trying to reach have low literacy and limited English proficiency, so we ideally want to be all providing as many of the same general information as possible, and then to repeat them in as many places and ways as we can.

Ideally, rather than actually using these specific messages outlined below, these will be used as a general guide, and will be converted into visual/audio content by community members. We know that both groups are low literacy audiences, and the focus group data indicates that both groups pay attention to videos and fun content on social media and other channels than formal messages.

We also know that they are more likely to follow the guidance if they are told that it is coming from CDC or the authorities since there has been mixed messaging from the political leadership.
It is a great opportunity to tap the younger generations in both communities, to provide them with some of this basic advice on good messaging and then to let them loose to be creative and encourage them to be those content creators for themselves and their families.

Not everyone has to do all the messages, you can divide it up and different partners can take a focus area.

If you need or want formal messages, CDC has a lot of great factual information, most of which has also been translated to Spanish.

CDC resources:

- CDC communication resources**:** https://www.cdc.gov/coronavirus/2019-ncov/communication/index.html
- CDC communication resources in Spanish: https://www.cdc.gov/coronavirus/2019-ncov/communication/index-sp.html

- Spanish social media toolkit: kit de herramientas para los medios sociales

- English social media toolkit: https://www.cdc.gov/coronavirus/2019-ncov/communication/social-media-toolkit.html

- CDC images and graphics https://www.cdc.gov/coronavirus/2019-ncov/communication/graphics.html

- YouTube videos might also be good. Included in that playlist is a webinar for community health workers. Most of the content, including the webinar, has an English language companion piece.

- PSAs: https://www.cdc.gov/coronavirus/2019-ncov/communication/public-service-announcements.html

- Print Resources: https://www.cdc.gov/coronavirus/2019-ncov/communication/print-resources.html?Sort=Date%3A%3Adesc

Messaging tips:

Try to avoid using statistics/numbers. Most people don't have a good grasp of data, don't understand percentages or fractions as well as they think they do, and just asking people to consider information from the analytical perspective actually has been shown to shut off the empathetic/emotional side of the brain. Therefore, just telling people what the data shows dehumanizes whatever comes next. It is more powerful to focus on an individual and a community narrative and tell the story of one person's experience first, and then to convey that into data if you need to present data. If you need to present data, use "social math" rather than percentages or big numbers. This means, instead of telling someone that 20% of people experience something, instead say 1 in 5 people in your community. Or instead of saying that a group makes up 17% of the population, but 45% of the cases, say the group only is equal to about 1 in 5 people in the state, but have had almost half of all the cases.

Tell stories and use narrative when you can. We are innately wired to like stories and narratives, it is our oldest form of communication about the ways of the world, of dangers, of successes and how to stay safe. If you can use video, radio, animation, or even infographic comic style print content to tell a short story, it will be far more impactful than just telling people facts and information. Even if you can't tell a whole story, including quotes from local people or adding testimonials can be very powerful.

Pictures tell 1000 words. The more that you can use animations, images of people and images of the concepts you are trying to share, video, or audio to convey information, the easier it will be for people to follow. Also, we live in a highly visual age, so most people have become accustomed to processing content through graphic representations.

Don't using fear without a solution. Fear tactics in messaging only work in 2 circumstances: 1) When the fear isn't so scary that it causes people to want to avoid the topic completely 2) When it is coupled with a solution. You can only effectively use fear if you tell people how to avoid whatever the scary thing is with very clear, actionable options. So, for example, don't say, COVID-19 is likely to kill people over 70, unless you are specifically going to tell people that those over 70 can avoid COVID by staying home, wearing masks, practicing physical distancing. And by telling people under 70 that they can avoid giving COVID-19 to their grandparents by staying apart, and washing hands, and not getting it themselves.

For the Marshallese audiences specifically. One of the things we are focused on is trying to ensure the materials are not just translated but are also designed with Marshallese/Micronesians in mind. Things translated directly from English are often still using concepts/language that is above the educational level of the target population, and/or are coming from a totally different cultural perspective, so they do not resonate. I would caution against English-only materials, too. Bilingual materials are most effective because they can reach both the English-speaking members of the household and the Marshallese-speaking members (often divided on generational lines). Memes and videos featuring familiar/famous Marshallese people are easier to get people to watch/listen/digest. Dr. Riklon, hosted a Facebook Live event where he addressed COVID. Specifically, name CDC or authorities in messages. ***Have a local spokesperson delivering the content, but have them start with "CDC says we should…"***

For the LX audiences specifically. Try to trans-create, rather than translate. Making things in Spanish by local folks will look and feel much more relatable than using mainstream English content and trying to

translate it. If possible, make memes, videos, and other content that will be easily identifiable and community specific. Specifically, name CDC or authorities in messages. ***Have a local spokesperson delivering the content, but have them start with "CDC says we should…"***

Message topics

Broad ideas for all audiences:

- COVID-19 can spread very quickly and silently, but it can be deadly. Take action to stay safe even if you don't feel sick. Follow CDC guidance as much as you can. The only way we can stop this is if we all follow the CDC rules.

- Just because you have to stay apart doesn't mean you need to be socially isolated. Reach out to your family, friends, and loved ones by phone, video, social media, or visit them but stay 6 feet apart and outside and limit groups size to less than 10.

- If you do not live in the same house with someone, they could have come into contact with different germs than you. Even your family members could be sick or silently carrying COVID-19, so be safe, follow CDC guidance, and keep your distance if you don't live together.

- There is no vaccine or treatment for COVID-19 and it is serious, so if we want to reduce the number of people getting sick and dying in our community, we need to stay safe by following the recommendations from your health department and CDC.

- Protect those you care about. If you think there is any chance you have been exposed to COVID-19 or if you are showing any symptoms, get tested as soon as you can.

- We know it's hard to stay apart from family and friends forever. If you can't connect virtually and need to meet up in person, here are a few tips:
    - Host gatherings outside and keep everyone outside
    - Don't share food and drinks
    - Limit touching the same things
    - Wash hands or using hand sanitizer
    - Stay 6 feet apart
    - Wear masks any time you are 6 feet from each other
    - Don't have more than 10 people together at one time
    - Try to keep the event short, 1-2 hours at most

- It might seem like no one else is following the rules, so be a good role model, and follow CDC and ADH guidance. If we all do our part, we can protect each other and keep our community from getting sick or dying.
    - If we do it in our community then we can be ahead of the game when it hits other communities.

Building a Message

Messages should have 3-4 components, depending on the product type (e.g., poster, short video). If you have a limited amount of time/space to capture someone's attention, such as on a digital web banner ad or something, then you want to focus on the hook and the resource of where they can go to

learn more. If you have more time and space or want the product to act more as a standalone item, such as an informational handout or video, then it should include all 4 elements.

-
- ***The hook or headline***- what is the motivational message/reason someone will tune in?
- ***The meat/substance***- what is the key important information you want someone to leave with?
- ***The call to action (CTA)***- what can someone do/what do you want them to do?
- ***The resource***- where to go for more information. Since messages are often short, you want to be able to direct people to someplace they can go to learn more- this might be a website, a local hotline, a community partner, or a health department.
    - Support in Spanish is available if people dial 211
    - A Marshallese call line is being set up and will be shared out as possible

Below we have provided some substance messaging by topic for all audiences, and then further down hooks and calls to action that are audience specific, and at the end some broad overarching messages.

<u>To make your own message:</u>

1. Pull whatever topic you need to explain from the ***Substance*** section
2. Add it together with a hook and a CTA from the **Audience Specific** section
3. Add your own local resource information

And you have a message, ready to go!

1-Substance of messages by topic- CDC Guidance

COVID-19 BASICS:

- SPREAD:
    - COVID-19 is spread by droplets coming out of people's noses and mouths when they breath, cough, or sneeze, and it moves through the air. It also lands on surfaces when people sneeze or cough.
        - The droplets can only travel about 6-10 feet, which is why you should stay at least 6 feet apart from people
        - Wear a mask when you share the air with someone indoors so that you don't blow COVID-19 out on them if you have it, and you don't breathe it in from them if they have it
        - Clean and disinfect surfaces where droplets may fall
        - Clean and disinfect areas people touch often because people may sneeze or cough into their hands, or touch their mouths and then touch other things which spreads the virus
        - Don't touch your face, eyes, mouth or nose, and don't sneeze or cough into your hand, use your elbow instead

- SYMPTOMS:
    - People can have COVID-19 for days before they start showing any symptoms, and some people may have it and never have symptoms, but they can still spread it to other people who may get very sick
        - If you think you were exposed, even if you have no symptoms:
            - Stay 6 feet away from people at all times

            - Wear a mask whenever you are inside a room, car, or space with others
            - Stay in a different room from other people if you can
            - Wash your hands and clean surfaces often
        - Try to keep others in your house at home too if possible, since they may have gotten it too
    - Older people and people with medical conditions, are more likely to get very sick from COVID-19 than younger people, so if you are an older person, or live with an older person, do everything you can to keep everyone safe and away from the virus.

- TREATMENT/PROTECTION:
    - There is no vaccine or treatment for COVID-19, and nothing can protect you from getting it except staying away from those who are sick
        - Stay at least 6 feet apart, don't hold large group activities, wear masks anytime you go out of your house, and don't go out if you or anyone in your house is sick or tested positive for COVID-19

- COVID TEST TYPES:
    - There are several different types of tests for COVID-19
        - 1) The nose swab, takes several days to get your test results and it tells you if you currently have COVID-19, whether you have symptoms or not
        - 2) The blood test (antibody test), gets results faster, but tells you something else. This test tells you if you already had COVID-19 in the past. If you test "positive" it means that you had COVID-19 at some point in the past, even if you had no symptoms. It does not mean that you are sick now.

COVID-19 TRANSMISSION/PREVENTION:

- When you are at **work**, the store, or anywhere indoors except your house:
    - Wear a mask covering your nose and mouth at all times except when eating
    - Always stay at least 6 feet apart from other people
    - Wear a mask if riding in a car with other people
    - Limit the number of people in the car if you can, and clean and disinfect afterwards
- Any time you are around ANYONE who doesn't live with you:
    - Wear a mask
    - Stay at least 6 feet apart
    - Spend time outside if you can
    - Don't share food or drinks
- When anyone in your home comes inside from being at work or out in the community:
    - Wash hands for at least 20 seconds
    - Remove outside clothes
    - Clean off anything you bring inside

- If you or anyone in your home starts feeling sick:
    - Everyone should get tested for COVID-19
    - Put the person in a separate room in the house away from everyone else if you can, and don't share a bathroom

        - If a person tests positive, everyone else in the house should get tested and should spend 14 days at home. Do not go out!

    - If you want to see friends or family in-person, here are some tips to keep everyone safe:
        - Host gatherings outside and keep everyone outside
        - Don't share food and drinks
        - Limit touching the same things
        - Wash hands or using hand sanitizer
        - Stay 6 feet apart at all times
        - Wear masks any time you are 6 feet from each other
        - Don't have more than 10 people together at one time
        - Try to keep the event short, 1-2 hours at most

    - Community and family safety starts with you. Set a good example and help spread the word. We are all in this together, so let's all do our part to keep each other safe.

TESTING:

The focus groups indicate that there is so much confusion on testing in both communities, that it would be advisable to make several videos, posters, handouts, and other resources that provide VERY clear step by step information about what the process is like, what happens after testing, who to call for your results, etc.

- The only way to protect yourself and others from COVID-19 if you think you may have been exposed is to get tested
    - Testing is happening in[these locations]
    - To get your results a few days after you get tested, call [_____]
    - Until you know your test results, you should:
        - Stay at home as much as possible, and stay in a separate room from everyone else if you can
        - Wear a mask even at home to protect those you live with
        - Wash your hands a lot, for at least 20 seconds
        - Wipe down and clean things that get touched a lot like door handles and countertops
    - If you test positive, don't be afraid to tell people. The only way we can stop COVID-19 is if we all protect each other, so anyone living with you or working close to you should also get tested, and they won't know they need to if you don't tell them.

- Knowing your status is the only way to protect those you love, especially older people who are more likely to get very sick. If you think there is any chance you have been exposed to COVID-19 or if you are showing any symptoms, get tested as soon as you can
    - Let other people know you might have been exposed
    - Don't be embarrassed, if you don't tell people, then other people can't protect themselves
    - We all have to fight COVID-19 together. Our community is stronger when we all do our part.

- Everyone is scared of getting tested for COVID-19 either because they worry they won't be able to keep working, or because they think that people will blame them, or because they are worried they will hurt their family or friends, but knowing is always better than not knowing.
    - Get tested today to know your COVID-19 status.
    - If you test positive, don't worry, there are resources to help you, and your friends and family will be there to support you, so don't be afraid to ask.
    - If you test negative, then make sure to take the next steps to stay healthy and safe, such as wearing masks, washing hands, and staying 6 feet apart from others at all times except in your home.
    - No one is to blame, we are all in this together, let's all do our part in stopping COVID-19 in our community.

STIGMA:

- We all love our family and our community and want to do what is best for them, which means we all have to do whatever we can to stop the spread of COVID-19.
    - No one is to blame if they test positive, we are all in this together, and we all need to do our part to stop COVID-19.
    - Get tested if you think you have been exposed
    - Don't be afraid to ask for help if you test positive. We all need to support each other to fight together.

- Everyone is scared of getting tested for COVID-19 either because they worry they won't be able to keep working, or because they think that people will blame them, or because they are worried they will hurt their family or friends, but knowing is always better than not knowing.
    - Get tested today to know your COVID-19 status.
    - If you test positive, don't worry, there are resources to help you, and your friends and family will be there to support you, so don't be afraid to ask.
    - If you test negative, then make sure to take the next steps to stay healthy and safe, such as wearing masks, washing hands, and staying 6 feet apart from others at all times except in your home.
    - No one is to blame, we are all in this together, let's all do our part in stopping COVID-19 in our community.

- No one is to blame for COVID-19, we are all in this together, so we all need to be doing everything we can to protect ourselves and others.

- YOU ARE NOT TO BLAME. Everyone, everywhere in the world is dealing with COVID-19, and we can't fight it without your help. We all must do our part to protect our families and communities and that starts with you.

SEEKING CARE:

- No one wants to go to the hospital if they don't have to, but if someone in your home is having any of these signs and might have COVID-19, see a doctor immediately:

1. Trouble breathing
2. Persistent pain or pressure in the chest
3. New confusion
4. Bluish lips or face

5. Inability to wake or stay awake
6. This list is not all possible symptoms. Please call [your local medical provider] for any other symptoms that are severe or concerning to you.

2-Audience specific hooks/calls to action/message appeals

Young LX:

- Hook: Protect yourself to protect your family and your community. Each of us has a role to play in stopping COVID-19.
    - Substance: Fill in with topic area from above
    - CTA: Your community needs **you** to keep everyone safe, show your love by staying apart.
    - Resource: fill in local resource

- Hook: We know physical distancing is hard, but at least you can stay connected virtually
    - Substance: Show the elders how to host zoom chats, watch movies together and even have family meals remotely.
    - CTA: We have the power to stop COVID-19 if we all stay together apart.
    - Resource: local info on guidance

- Hook: We know it's hard to stay apart from family and friends forever. If you can't connect virtually and need to meet up in person, here are a few tips:
    - Substance:
        - Host gatherings outside and keep everyone outside
        - Don't share food and drinks
        - Stay 6 feet apart at all times
        - Wear masks any time you are 6 feet from each other
        - Don't have more than 10 people together at one time
        - Try to keep them short, 1-2 hours at most
    - CTA: Be the role model your friends need. Be safe, and stay healthy, and together we can stop COVID-19
    - Resource: local info on guidance

Adult LX:

- Hook: You are the glue that holds your family together. Keep each other safe and healthy by following the CDC recommendations.
    - Substance: Fill in with topic area from above
    - CTA: Support your family and your community by preventing COVID-19 and encouraging those you love to do also.
    - Resource: local info on guidance

- Hook: Be the changes you want to see in your community. Protection starts with each of us, so set a good example, and encourage your family and friends to be like you.
    - Substance: Fill in with topic area from above
    - CTA: If we all do our part, we can protect our community from COVID-19 together.
    - Resource: local info on guidance

Young MS:

- Hook: Older people are most at risk of getting very sick from COVID-19. Protect yourself to protect your elders (use Marshallese word for Grandparents). COVID-19 can be invisible but still be spreading.
    - Substance: Fill in with topic area from above
    - CTA: Your family needs you. Share what you know, and be stronger as a community.
    - Resource: fill in local resource

- Hook: Protect yourself to keep your culture and your community strong. Elders are most at risk, so by staying healthy and safe you are keeping them healthy too.
    - Substance: Fill in with topic area from above
    - CTA: Your family needs you. Share what you know, and be stronger as a community.
    - Resources: local

- Hook: We know physical distancing is hard, but at least you can stay connected virtually
    - Substance: Show the elders how to host zoom chats, watch movies together and even have family meals remotely.
    - CTA: We have the power to stop COVID-19 if we all stay together apart.
    - Resource: local info on guidance

- Hook: We know it's hard to stay apart from family and friends forever. If you can't connect virtually and need to meet up in person, here are a few tips:
    - Host gatherings outside and keep everyone outside
    - Don't share food and drinks
    - Stay 6 feet apart
    - Wear masks any time you are 6 feet from each other
    - Don't have more than 10 people together at one time
    - Try to keep them short, 1-2 hours at most
    - CTA: Be the role model your friends need. Be safe, and stay healthy, and together we can stop COVID-19
    - Resource: local info on guidance

Adult MS:

- Hook: We are all facing some tough choices right now, but if you want to keep your family and your culture strong, you need to follow the CDC rules and stay safe.
    - Substance: Fill in with topic area from above
    - CTA: Show your family how much you love them by protecting your elders [Marshallese word for elders/parents] from COVID-19. We are stronger together, so let's stop COVID-19 in our community today.
    - Resource: local number to call in Marshallese to help connect to resources

- Hook: The community starts with you. Be the role model and follow the CDC guidance. Stay apart, wear a mask, stay home, stay safe.
    - Substance: Fill in with topic area from above
    - CTA: If you have questions about what you can do to help your community, call the number below and find out more.
    - Resource: local number to call in Marshallese to help connect to resources

Hook: The only way to keep the whole community safe and lower the number of people getting sick and dying is to make sure everyone is doing everything they can.

- Substance: Fill in with topic area from above
- CTA: We can take the lead from the Islands, and stop COVID-19 in our community by all doing our part.
- Resource: local number to call in Marshallese to help connect to resources

Elder MS:

- Hook: The only way to keep our community safe and protect our culture is if we all stay home and stay healthy.
  - Substance: Fill in with topic area from above
  - CTA: We are all in this together, here, in the Marshall Islands (use local word) and all over the world, so let's all do our part and stop COVID-19 today.
  - Resources: fill in with your local resources

- Hook: We know how much you love your community and your culture. Make sure everyone stays strong together. Follow the CDC guidance and help stop COVID-19 in your community.
  - Substance: Fill in with topic area from above
  - CTA: If you have questions about what you can do to help your community, call the number below and find out more.
  - Resource: local number to call in Marshallese to help connect to resources

Businesses/employers:

Gaining buy-in from local businesses and large employers is going to be equally important in stopping transmission, and they likely have a big impact in the community and can be a part of the solution. There are 2 levels of messaging for businesses: 1) messaging to them as an audience to help and to instruct them on what they can do 2) messages that you want them to share with their employees and customers.

First level:

- Your community relies on you as a pillar of the community. Support your community by doing your part to keep community members and your employees safe.
  - Provide masks for employees
  - Ensure workspaces allow employees to maintain 6 feet of distance at workstations and in break areas, and post signs in English, Spanish and Marshallese, reminding people to do so
  - Offer on-site COVID testing if possible
  - Provide full paid sick leave and require employees to use it if they are sick or are waiting for the results from a COVID-19 test if they have been exposed
  - Remember, if your workers are coming in to work sick, pretty soon there won't be a workforce left, so encourage people to stay home to stay safe
  - Put up protective barriers where possible
  - Add hand sanitation stations
  - Play recorded messages to educate and promote prevention in English, Spanish and Marshallese

- Remember, as a business, you can mandate things that go beyond the local laws, such as requiring masks or limiting the number of people in your facility. So, you have the power to change social norms and set a good example throughout the community. Use that power wisely and stop the spread of COVID quickly to help things go back to business as usual.

Second level:

- Be the leader in your community, set the example of what good prevention looks like
    - Require all customers and workers to wear masks in your facilities
    - Provide ways for customers and employees to maintain 6 feet distance at all times
    - As a restaurant- only offer take out or outdoor seating with at least 6 feet between tables
    - Add hand sanitations stations for customers
    - Encourage people to stay home if they don't feel well
    - Post educational information in your facilities in English, Spanish and Marshallese
    - Use your communication channels (e.g., your company's Facebook page or email listserv) to spread factual information about COVID-19 prevention and safety in English, Spanish and Marshallese

- CTA: Help to reduce stigma and blame toward anyone in the community, remember we are all in this together, and we all have a role to play in stopping COVID-19.

What can I do?

We know you want to help, so here are some things you can do. Remember, use the messages above as a guide, and make them your own. The community needs to hear them in your voice because you are the expert in your community.

Health Department/Public Health System

- Help to spread official messages through all partnering organizations and groups on the ground in English, Spanish and Marshallese
- Serve as the point people to coordinate various messages and messaging strategies by all the partners involved
    - Coordinate with CBOs and other groups to divide and conquer the messaging landscape, it will be easier if you all work together and each take a focus area or channel
- Promote best COVID-19 prevention practices in your facilities
- Use your channels of communication to reach the community
- Provide technical assistance to community partners on good messages and best channels
- Pay for paid media buying on social media, google, radio, TV
    - Or coordinate free/donated space
- Coordinate media efforts across organizations so that you can maximize reach. For example, if one group is buying spots on Univision, turn another group toward radio or Facebook so that the blanket of messages is broad and deep.
- Encourage virtual gatherings instead of in person activities
- Make sure employers have good resources for protection, prevention, and what to do if sick in Spanish and Marshallese
- Assist with the Marshallese community to feel like their high death count is being taken seriously and that discrepancies are being addressed

    - We know you are doing your best, but if they feel like they are not being heard or counted, then they are going to continue to have a lack of trust in the medical system.
    - Be as transparent as possible, and ask them to help- anything they can do will make a difference in gaining trust and buy-in and giving them as sense of control over a scary situation
- Create and promote a repository of translated information for a variety of CBOs to access, or work with a CBO to do so.
- Share the translated Governor's message in the repository so that local organizations don't have to translate it

Employers

- Help to spread CDC messages in English, Spanish, and Marshallese,
    - Play audio messages in these languages while people are at work
    - We have some we will be providing out
    - Put up posters and other information at work
- Promote best COVID-19 prevention practices in your facilities
- Remember, as a business, you can mandate things that go beyond the local laws, such as requiring masks or limiting the number of people in your facility. So, you have the power to change social norms and set a good example throughout the community. Use that power wisely and stop the spread of COVID quickly.
- Use your channels of communication to reach employees, their families and your customers
- Guidance for poultry processing facilities: https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/meat-poultry-processing-workers-employers.html

Community Based Groups

- Help to spread messages provided here or those directly from CDC website in Spanish or Marshallese
    - Take these messages and make them your own! They will be much more powerful coming from you, said in your way because you are the experts in your community.
    - Use them as a guide and speak in your voice to the community you support
    - Make sure to mention that they are official guidance from CDC or the health department
- Coordinate with the Health Department and other groups to divide and conquer the messaging landscape, it will be easier if you all work together and each take a focus area or channel
- Promote best COVID-19 prevention practices in your facilities
- Use your channels of communication to reach employees, their families, and your network
- Help to set up earned media opportunities (e.g., local radio, TV or newspaper stories to raise awareness)
- Host local COVID- 19 testing events, encourage community members to get tested
- Do phone/WhatsApp/social media outreach
- Be role models of best prevention practices
- Speak up!
- Encourage virtual gatherings instead of in person activities
    - Virtual movie watching
    - Virtual prayer services

    - Virtual funeral services

Churches

- You have a lot of power, and your community listens to you, so please use that voice!
- Help to spread messages provided here or those directly from CDC website in Spanish or Marshallese
    - Take these messages and make them your own! They will be much more powerful coming from you, said in your way because you are the experts in your community.
    - Use them as a guide and speak in your voice to the community you support
    - Make sure to mention that they are official guidance from CDC or the health department
- Weave COVID-19 prevention messages into your services
- Spread these messages through word of mouth to dispel myths and misinformation!
- Promote best COVID-19 prevention practices in your facilities
- Mandate best practices where you can, such as requiring masks and distancing
- Use your channels of communication to reach employees, your parishioners, and their families
- Limit in-person gatherings
- Work with your local health department
- Encourage virtual gatherings instead of in person activities
    - Virtual prayer services
    - Virtual funeral services

Community Thought Leaders, Stakeholders

- Be a spokesperson- formally or informally you could record a video, make a statement, be interviewed by a local news group, be featured in a poster, share on social media, etc.
- Help to spread messages provided here or those directly from CDC website in Spanish or Marshallese
    - Take these messages and make them your own! They will be much more powerful coming from you, said in your way because you are the experts in your community.
    - Use them as a guide and speak in your voice to the community you support
    - Make sure to mention that they are official guidance from CDC or the health department
- Spread these messages through word of mouth to dispel myths and misinformation!
- Be an example! Promote best COVID-19 prevention practices in your networks- encourage family and friends to physically distance, to wear masks when they are outside the home, to limit the size of gatherings, and encourage those gatherings to take place outside
- Use your leadership position to “mandate” best practices where you can
- Use your channels of communication to reach network and strongly encourage your network to stop misinformation and to pass along accurate information
- Limit in person gatherings
- Work with your local health department and community groups to help spread the word
- Encourage virtual gatherings instead of in person activities
    - Virtual movie watching
    - Virtual prayer services

    - Virtual funeral services

Youth Advocates and Influencers

- Be a cultural broker- you speak English and you can more easily follow mainstream advice and news. You also are probably more tech savvy than the older folks in your community, so use that knowledge and power to keep your community safe and healthy.
- Be a spokesperson- formally or informally you could record a video, make a statement, be interviewed by a local news group, be featured in a poster, share on social media, etc.
- Help to spread messages provided here or those directly from CDC website in Spanish or Marshallese
    - Take these messages and make them your own! They will be much more powerful coming from you, said in your way because you are the experts in your community.
    - Use them as a guide and speak in your voice to the community you support
    - Make sure to mention that they are official guidance from CDC or the health department
- Spread these messages through word of mouth to dispel myths and misinformation!
- Be an example! Promote best COVID-19 prevention practices in your networks- encourage family and friends to physically distance, to wear masks when they are outside the home, to limit the size of gatherings, and encourage those gatherings to take place outside
- Use your channels of communication to reach network and strongly encourage your network to stop misinformation and to pass along accurate information
- Limit in-person gatherings, or host them outside, with less than 10 people at a time
- Work with your local health department and community groups to help spread the word
- Encourage virtual gatherings instead of in person activities, and encourage the older people to do the same
    - Virtual movie watching
    - Virtual prayer services
    - Virtual funeral services
    - Virtual dinners and family parties

Appendix 6. Training Proposal for ADH Staff – Protecting workers against COVID-19

Proposed Title: Working effectively with manufacturing, poultry processing facilities and other employers to protect workers against COVID-19: a review of CDC guidance, tools, and tips to train others

By: National Institute for Occupational Safety & Health, Worker Safety and Health Team, Virtual Occupational Technical Assistance Branch (COVID-19 Response)
Format: Zoom webinar (set up by Arkansas Department of Health)
Length: 2 hours total, 1.5 hours presentation and 30-minute Q&A
Date TBD: Option 1: July 8th, 9-11am or Option 2: July 9th, 10am-noon (these are flexible)

Session description: This two-hour session will provide an overview of sources of exposure to SARS-CoV-2, the virus that causes COVID-19, and CDC guidance and assessment tools to assist employers with reducing exposure to the virus among their workforce. The session will focus on manufacturing and meat and poultry processing facilities, but the principles will have wide applicability to many other work settings. Additional topics to be covered: current CDC resources to assist employers, a question and answer session, and tips and resources for training others on the assessment tools.

Who should attend?
State and local health department staff in Arkansas who may be asked to respond to worker and employer questions on how to protect their workforce from COVID-19 and who may be willing to train others on the tools presented.

Outline:

1) Review of SARS-CoV-2 Exposure Risk
2) Elements of an employer COVID-19 assessment and control plan
    - Identifying qualified workforce coordinators responsible for the plan
    - Hierarchy of controls
        - Engineering controls
        - Administrative controls
        - Personal Protective Equipment (PPE)
    - Education and training
    - Cleaning and disinfection
3) Managing the workforce
    - Screening and monitoring workers
    - Considerations on testing and contact tracing
    - Managing sick workers
    - Return to work
    - Workers' rights
4) Manufacturing facility assessment tool
5) Poultry plant overview (optional)
6) Meat and poultry processing facility assessment tool
7) Train the trainer: Tips for training others on CDC guidance and the facility assessment tools
8) Overview of other CDC Resources for employers (many fact sheets for other industries available)
9) Questions and Answers from attendees

NOTE: Need to have Arkansas Department of Health representative available in Q&A portion for questions that pertain to Arkansas DOH regulatory authority, etc.

Appendix 7. CDC/ADH AR-3 Field Team Members

Role	**Name**
CDC Medical Epidemiologist/CDC Team Lead	**Juliana Da Silva**
CDC Epidemiologist/CDC Team Lead	**Angela L Hernandez**
CDC Epidemiologist	Daniel Martin
CDC Epidemiologist	Elisabeth Krow-Lucal
CDC Communication Specialist	Emily Lilo
CDC Medical Officer	Jerry Mazurek
CDC Behavioral Scientist	Katherine Center
CDC Behavioral Scientist	Nichole Zimmerman
CDC EIS Officer/ ADH Point of Contact	Allison James
ADH Epidemiologist	Kristyn Vang