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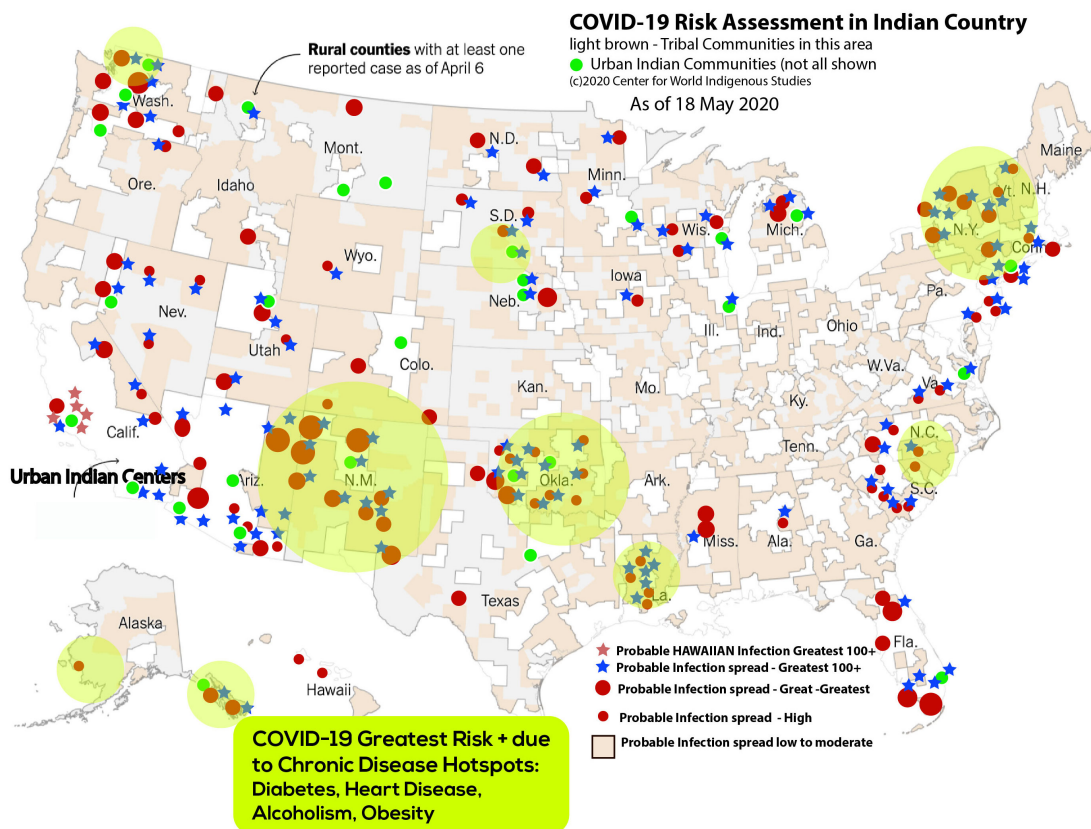
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Olympia, Washington 98502 USA

COVID-19 Indian Country Pandemic Risk Assessment Update 18 May 2020

Rudolph C. Ryser, PhD; Leslie E. Korn, PhD, MPH; Leonard Mukosi, LLM; MA, Maria Bone, MLS

After six weeks of intense documentation and data collection describing the emergences of COVID-19 in Indian Country we have five findings that must be urgently considered by Indian Country leaders and communities.

Figure 1 Indian Country Most Vulnerable to COVID-19



FINDING 1: All of Indian Country is at the very highest risk level of COVID-19 Infections

FINDING 2: Individuals in Indian Country who are at the greatest risk of infection and death are among the 11% or higher proportion of the population who suffer from chronic diseases (diabetes, heart disease, kidney disease, obesity, among other conditions). (SEE Figure 1 Green with 11% or higher Chronic Disease)



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FINDING 3: Indian Country cannot rely on Federal, State and Private Epidemiological data since virtually no data gathering is being reliably and systematically conducted in Indian Country populations.

FINDING 4: Indian Country is now at Risk of Major Health disaster due to exposure and chronic health vulnerabilities.

FINDING 5: Indian Country must immediately spend the next month organizing local, regional and country-wide coordination of local COVID-19 spread prevention and limitation since neither the Federal Government nor the State, county and municipal governments in the United States have the capability to focus on Indian Country needs and emergent health requirements.

CURRENT FINDINGS narrative:

- 1. All of Indian Country is at the very highest risk level: All tribal and Alaskan Native Communities, Hawaiian Natives, Fourth World migrant, and refugee populations and urban native communities are now at Greatest (+) Risk of contracting COVID-19.** Presenting evidence in support of warnings about the spread of this disease that is so pervasive in and near these cohort populations that it is not reasonable for us to further document the risk of COVID-19.
- 2. Individuals in Indian Country who are among the 11% or higher proportion of the population who suffer from chronic diseases (diabetes, heart disease, kidney disease, obesity, among other conditions) are at the greatest risk of infection and death.** We estimate that 319,000 community members with chronic health conditions in tribal and Alaskan Native communities. They must not be exposed to more than one or two persons who take special precautions with protective measures through the summer of 2020 and months of Winter 2021. These practices also apply to Hawaiian Natives, migrants and refugees, and urban native populations. While ALL of Indian Country requires a coordinated and systematic response to the spread of COVID19 six clusters noted in Figure 1 above must receive immediate attention to prevent further spread and limit its intrusion since persons with high levels of chronic disease are perhaps the most vulnerable to infection and the most severe consequence—death.
- 3. Indian Country cannot rely on Federal, State, and Private Epidemiological data since virtually no data gathering is reliably and systematically conducted in Indian Country populations.** There is no consistent, reliable information about contact tracing, testing, availability of protective equipment, and trained local



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personnel. There is no coherent and cohesive plan to prevent and limit the spread of COVID-19 in Indian Country, rendering 8 million people wholly exposed to the virus.

4. **Indian Country at Risk of Major Health disaster: Every community in Indian Country is now at the highest risk of contracting the disease and will continue to be at risk for at least the next 18 months.** The COVID-19 Indian Country Pandemic Risk Assessment documented the emerging risk to tribal and urban native community health for 437 American Indian and Alaskan Native communities, 46 Urban native communities and 13 Hawaiian Native communities (California and Hawaii) confirming that the level of risk of compromising individual and community health is at the maximum. The high-level risk conclusion is due to the proximity of cohorts to concentrated populations and the movement of asymptomatic and symptomatic individuals in and out of these communities.
5. **Indian Country must immediately spend the next month organizing local, regional, and countrywide coordination of local COVID-19 spread prevention and limitation.** Since neither the Federal Government nor the State, county, and municipal governments in the United States can focus on Indian Country needs and emergent health requirements. The Tribal Epidemiological Centers, Indian Health Service, Center for Disease Control, and all of the Indian Health Boards do not have access to comprehensive and detailed data on the spread of COVID-19 and deaths in Indian Country. Since the United States government and its sub-governments failed to implement a US commitment in 2014 to “disaggregate” population, health, economic and other data specific to the 574 tribal communities, 41 urban native centers and information about Hawaiian Natives, native migrant and refugee populations planners and organizers intent on responding to COVID-19 are blind to the various populations in Indian Country. They do not have credible access to or the ability to obtain current information. Consequently, it is up to the tribal communities and other cohorts in Indian Country to immediately launch coordinated local, regional and countrywide data collection, planning, and organization of technical and operational capabilities to respond to the COVID-19 pandemic. Coordination, planning, organization, and establishment of operational capabilities must be carried out between May 2020 and September 2020 to respond to current infection threats and disease spread—especially in the light of a likely new COVID-19 wave in the Fall and Winter months ahead.



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Executive Report

The CWIS COVID-19 Indian Country Pandemic Risk Assessment has been tracking—since 6 April 2020—weekly changes in the risk of infection that the COVID-19 Pandemic poses to the 2.9 million persons in tribal and Alaskan Native communities, 400,000 Hawaiian Natives, and estimated 1 million migrant and refugee Fourth World peoples in the United States in rural and urban locations and the 3.69 million American Indian people in US urban centers.

The combined estimated 8 million people who make up these five cohorts are not, for the most part, included in COVID-19 tracking or data gathering activities by Johns Hopkins, Center for Disease Control, Indian Health Services, states, and counties. For only a few states, only the most general figures are compiled to characterize COVID-19 infections and deaths.

The **COVID-19 Indian Country Pandemic Risk Assessment** documented the number of COVID-19 cases in more than 400 counties that are primarily made up of tribal territories and concentrated populations in proximity to tribal communities that could serve as sources of COVID-19 spread. Our research team examined data from 38 states and recorded as of this report 220,632 COVID -19 infection cases and 10,809 deaths. We compared data between state websites, the CDC, Indian Health Service, Johns Hopkins University, the New York Times to generate this Risk Statement. However, we believe that there is ample evidence that these figures are low compared to actual cases and deaths.

We think it is more accurate to increase the general figures by 20% to 50% since testing in these localities is relatively limited and it is widely understood that COVID-19 asymptomatic persons (among those not tested) and persons who have died but not tested for cause strongly indicated that higher case and death levels are warranted. If the 20% to 50% higher-level range is applied the Indian Health Service's 17 May 2020 report of 75,462 tests and 7,244 positives, then the case level must be higher. The tests given comprise 3% of the HIS service population of 2.6 million people with 7,244 positives; therefore, it is **reasonable to conclude that the actual cases range is between 8,692 cases and 10,866 cases in the HIS service population as of the middle of May 2020.**

The CDC combines data concerning cases and deaths using the US Census Bureau's categories: concluded that tribal and Alaskan Native communities have experience 26,215 cases. This is based on source population figures that are 47.9% of the total cases since "race" was not included in their source data for the other 52.1% of the study population of 1,164,011 people. Applying the test applied to the HIS figures we must conclude that the



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CDC case range is between 31,458 cases 39,323 cases calculated for American Indian and Alaskan Natives.

Between these two sources of data American Indians and Alaskan Natives have been suffering between 7,244 and 26,215 COVID-19 cases or a difference of 28%. These figures are strong evidence that the United States government has no idea what is going on in Indian Country.

GREEN BUBBLE MAP Conclusions:

The **COVID-19 Indian Country Pandemic Risk Assessment** demonstrates that Indian Country (including is five cohorts) is vulnerable to the spread of COVID-19, risking the most significant possible damage to populations since the 1918 Influenza pandemic. Just as Indian Country was ignored or fundamentally marginalized during the most dangerous population scourge at the beginning of the 20th century, so is Indian Country made “invisible” and left to suffer the consequences of the deadly COVID-19 disease.

Blue Stars were added to the 23 April mapping of tribal communities at greatest risk to indicate locations where confirmed COVID-19 infections per 100,000 are equal to or greater than 100 cases—classified now as Greatest Risk (+). This level of risk is essentially a “code red” to tribal communities in rural and urban settings.

Concluding as we have that virtually all of the 8 million people making up the five cohorts in the **COVID-19 Indian Country Risk Assessment** are fully vulnerable to the spread of COVID-19 the Assessment has been refined to identify “hotspots” where the disease threatens the weakest of the vulnerable—sufferers of chronic diseases and the elders. We spotlight six locations where we have identified clusters where 11% or more Indian Country people suffer from chronic diseases-- particularly diabetes.

- These clusters include populations in Washington State (e.g., Lummi Nation, Nooksack Tribe, Sauk-Suiattle Tribe, Puyallup Tribe, Stillaguamish Tribe, and Snoqualmie Tribe) and in South Dakota (e.g., Pine Ridge, Rosebud Indian Reservation, and Lower Brule).
- The major threat to populations in Arizona and New Mexico are critical (e.g., Hopi, Zuni, Tohono O’odham, Navajo, Havasupai, Ute Mountain Tribe, and Santa Clara Reservation).
- We note that Oklahoma is a “hotspot” requiring immediate support (e.g., Comanche, Cherokee Nation, Delaware, Pawnee Nation, and Caddo Indian Tribe).



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- In the state of Louisiana, there is a sizable risk to the population (e.g., Coushatta Tribe, Grand Caillou/Culac Band, Calcasieu Tribe, and Clifton Choctaw).
- In North Carolina tribes are at risk due to chronic disease vulnerabilities (e.g., Lumbee Tribe, Waccamah-Siouan Tribe)
- New York, Vermont, and Connecticut include tribes with chronic disease vulnerabilities to COVID-19 infection (e.g., Tuscarora Reservation, Cattraugus Reservation (Eriehronon), Shinnecock Reservation, Stockbridge–Munsee Community, Schaghticoke Tribal Nation, Golden Hill Paugussett, Elnu Abenaki Tribe, and Mississquoi Abenaki Tribe).
- Urban localities that are vulnerable to the COVID-19 spread grown large are in hotspots as well (e.g., Long Island, Oklahoma City, Albuquerque, Seattle, Phoenix, and Sioux Falls).

The presence of diabetes, obesity, heart disease, kidney disease, and other chronic conditions renders individuals with these conditions extremely vulnerable to COVID-19, and consequently, Public Health officials warn communities to provide extra special attention to the health security for these people.

While the Assessment identifies specific tribes and tribal communities, the actual level of COVID-19 cases and deaths particular to each tribe or community was not entered. This lack of accurate tribal information is because there is no current epidemiological system for fully documenting testing, cases of infection, and deaths due to COVID -19. The most reasonable approach to assess the danger of COVID-19 was “proximity” to vector populations—concentrated populations infected by the disease.

The Center for World Indigenous Studies **COVID-19 Indian Country Risk Assessment** has been conducted to measure risk from documented evidence of cases and deaths in proximity to tribes and tribal communities. Absent extensive testing and contact tracing and monitoring of each tribal home regularly, it is not now possible to determine with absolute accuracy the number of asymptomatic and symptomatic cases. There is no extensive or even significant testing being conducted in tribes and tribal communities. Until testing and tracing are actually conducted, it is not possible to know with certainty the extent of COVID -19 spread in Indian Country.



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By documenting Risk, the Center for World Indigenous Studies Assessment is intended to alert tribes and communities to the disease proximity and probable spread.

The Center for World Indigenous Studies was asked by tribal leaders to undertake an initiative to develop information and policy recommendations for Indian Country USA responding to the COVID-19 Pandemic. We have undertaken to:

1. Investigate, Document and Report on Best Practices tracking COVID-19 infections and deaths, and the application of traditional medicine and health for prevention and treatment of the virus in tribal communities and urban Native communities.
2. Develop Public Health and Traditional Medicine guidance, reports and recommendations to sustain individual, family and community emotional and biological resilience, mental health and strong immune function supported by nutritional factors.
3. Reach out directly to tribal individual and communities through communications, content narratives, scripts and distribution produced in part by the CWIS vide/audio team and with partners including FNX Indian Television Network, and the Native Public Media reaching the majority of rural and tribal communities and the urban native communities.

The CWIS Team has updated its earlier data on COVID-19 Risk to Indian Country in the United States. **By documenting Risk, the Center for World Indigenous Studies Assessment is intended to alert tribes and communities to the disease proximity and probable spread.**

Methodology

Since there is no consistent or comprehensive data collection for the 574 tribal communities, 46 Urban communities, and 13 Hawaiian communities, the CWIS Assessment sought to gather data from the closest sources to tribal communities and other vulnerable communities—counties and other localities. Our Assessment attempted to include all 574 tribal communities, but 137 provided illusive to our efforts. Consequently, we were able to obtain proximity data for 437.

We have drawn from various research sources, including online sources: Johns Hopkins, Reuters (local, county and hospitals), the New York Times, Indian Health Service, and USAFacts [an online non-profit service]. This “proximity assessment” is further affected by the quality and consistency of these sources, so we compare data from these sources to derive the most accurate information possible. The County Focus allows for geographic coverage that state and US government data cannot provide. Since many tribes



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occupy whole counties or several tribes occupy a single county, the data needed to be confirmed by comparing with the Johns Hopkins University and Center for Disease Control, and the website USAfacts.org. All case and death data for the counties included were updated on 18 May 2020.

The absence of testing, contact tracing, and weekly monitoring in tribal households reduces the accuracy of totals for cases and deaths. Therefore, we use the measure of “cases equal to or greater than 100/100,00” that measures “concentrations” in proximity to tribal communities. The Tribal Epidemiological Centers funded by the United States government do not have consistent or accurate data though they attempt to obtain information from individual tribes in many cases. The absence of health facilities and hospitals for most tribal communities results in undercounting as well.

Recent studies have concluded that the number of cases and deaths are logically short of the actual levels. Three studies (one in Italy) found that the public numbers are undercounted by a factor of 5 to 10. Li Ruiyun of MRC Centre for Global Infectious Disease Analysis in London led an international study team that concluded that the transmission rate was 55% of documented infections (“Substantial undocumented infection facilitates the rapid dissemination of novel coronavirus” 16 March 2020). Projecting wider COVID-19 spread the number of undocumented infections in Indian Country is likely to be high, and therefore a ten-fold increase over current figures could be expected. “A ratio of one certified case out of every 10 is credible,” according to Angelo Borrelli, the head of the Italy’s Civil Protection Agency (Reuters, Europe News. 24 March 2020). However, recent studies suggest that one certified case can be evidence of 5 to 80 hidden cases.

This error variable means that the numbers we site may reflect an undercount of undetected, asymptomatic and symptomatic persons who have contracted COVID-19 with the result that our number may be as high as 1,322 million to 2,634 million cases with tribal communities experiencing infections as high as 26,340 tribal and urban Indian community members (at 1% of the population). Indeed, recently published, this is an estimate based population proportion represented by tribal members.

FINAL NOTE:

It is increasingly clear that Indian Country (including Alaskan Natives, Urban Native Centers and Indian emigrants and migrants) **MUST now organize a countrywide action**



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plan that considers the unique circumstances of each local community. Consideration must be given to population, demographics of each community, chronic disease, water availability, level of poverty, family concentrations per housing unit, and ceremonial and funeral practices). The Indian Country COVID-19 Response Action Plan must be comprehensive and organized at the local, regional, and countrywide level with tribal leadership coordination locally. Now that many tribal communities have received or will receive a portion of the CARE appropriation from the US Congress, those funds must be put to infrastructure reform. Testing, contact tracing, in-home individual health monitoring several times a week, traditional healers and health practices must be applied; community health representatives must be retrained to monitor households (4-5 households per representative), including tests and contact tracing as well as quarantining those severely infected. Indian Country cannot wait. As some nations are blocking off roadways to prevent incoming infections and closing down social, commercial, and government activities, more must be done. Indian Country's vulnerabilities are greater than just about any people in the United States and only tribal community leaders have the responsibility to act and organize an Indian Country COVID-19 Response Action Plan.

This Assessment is intended as an alert for tribes and urban Indian communities and to report on Best Practices we have found to have good results. We do this by indicating the level of risk we calculate and assign Greatest, Great, High, Elevated, Moderate, or Low according to levels of infection in proximity to specific tribal and urban Indian communities. This designation is not an absolute calculation of infections on Indian reservations or other tribal and urban Indian community since no such data (even when there are a few tests) exists. We have chosen the "proximity" as a measure as the most useful information for tribal leaders, public health officials, and community health workers on the ground. Indeed due to the lack of reliable testing, onsite tribal community data for infections and case tracking, and the occasional location of tribal communities near urban settings where higher concentrations of COVID-19 exposures and confirmed infections had been documented. Again, in all instances, we recognize that the levels of contamination in Indian Country could be 5 to 80 times higher than recorded levels.