



**2021 ANNUAL
CONFERENCE**

**JUNE 13 – 17
#CSTE2021**

csteconference.org

BUILDING BRIDGES TO HEALTH

RWJF AWARD

CSTE AWARD IN ADDRESSING RACIAL AND ETHNIC DISPARITIES

This is the fourteenth annual presentation of the “Robert Wood Johnson Foundation (RWJF) National Award for Outstanding Epidemiology Practice in Addressing Racial and Ethnic Disparities” by the Council of State and Territorial Epidemiologists (CSTE). This award was established to recognize an individual presenter at the CSTE Annual Conference whose professional work advances public health knowledge through epidemiology and applied research in racial and ethnic disparities and improves public health practice through effective use of data and epidemiology.

There were 568 abstracts submitted for participation in the 2021 CSTE Annual Conference. In total, 17 abstracts were considered for the award. Of those abstracts that met the criteria for consideration, five finalists were chosen.

CSTE Health Equity Subcommittee co-leads, Duc Vugia and Alfreda Holloway-Beth convened a panel of judges to select the five finalists from abstracts submitted to the CSTE Annual Conference Planning Committee. Judges used the following criteria for selecting the award recipient:

- Impact of work to the field of eliminating health disparities
- Contribution/translation to practice
- Policy implications for evoking long term change in eliminating and preventing health disparities
- Quality of poster or breakout session presentation

CSTE will present one of the finalists a plaque to commemorate this fourteenth annual award together with an honorarium valued at \$1,000. The award will be presented on Thursday, June 17th during the Awards Ceremony and Jonathan Mann Memorial Lecture. Presentations are indicated on the program agenda with an asterisk (*).

ABSTRACT REVIEW COMMITTEE

CSTE is appreciative of the review committee who volunteer their time to make this award a reality. The role of the review committee is to review and score the eligible abstracts submitted to the CSTE Annual Conference Planning Committee and review and score the finalists' presentations for the RWJF Award winner. If you are interested in participating on this committee, please contact the CSTE national office. The 2021 RWJF Award Review Committee consists of the following professionals:

Duc J. Vugia, MD, MPH is Chief of the Infectious Diseases Branch at the California Department of Public Health.

Alfreda Holloway-Beth, PhD, MS is the Director of Epidemiology at the Cook County Department of Public Health.

James L. Hadler, MD, MPH is a Public Health Consultant at the Yale University School of Public Health.

Alicia Fletcher, MPH is an Epidemiologist in the Bureau of Occupational Health and Injury Prevention at the New York State Department of Health.

Robert Graff, PhD is the Chronic Disease Epidemiology and Surveillance Director at the Idaho Department of Health and Welfare Division of Public Health.



SUJATA JOSHI

Northwest Portland Area Indian Health Board

Sujata Joshi is the Director of the Improving Data and Enhancing Access – Northwest (IDEA-NW) project at the Northwest Tribal Epidemiology Center. In this role, she oversees activities to address the misclassification of American Indian/Alaska Native people in state surveillance datasets. Sujata and her team work to provide accurate data on a wide range of health issues to Northwest Tribes and increase awareness of tribal health needs in the broader public health community. She obtained her MSPH in epidemiology and biostatistics from the Rollins School of Public Health, and previously worked for the State of Oregon and the Inter-Tribal Council of Arizona.

#14078 Assessing Misclassification of American Indian/Alaska Native People in Washington's Syndromic Surveillance Data*

SESSION

Surveillance / Informatics II - Traversing the SyS-pension Bridge:
Syndromic Surveillance Efforts in Detection, Reporting, and Analysis

PRESENTATION June 14 - 1:10pm

ABSTRACT

BACKGROUND

American Indian/Alaska Native (AI/AN) people are often misclassified as White or other races in public health data, resulting in the underestimation of disease burden and health care utilization in this population. Probabilistic linkages with tribal registries are an effective tool for addressing AI/AN misclassification in surveillance datasets, but to date have not been applied to syndromic surveillance data. In this study, we assessed the effect of AI/AN misclassification in Washington hospital visits by linking the Northwest Tribal Registry with four months of hospital visits captured in the State of Washington's syndromic surveillance program (Rapid Health Information NetwOrk (RHINO)).

METHODS

We used Match*Pro to conduct a probabilistic linkage between the Northwest Tribal Registry (a demographic dataset of AI/AN patients registered at Indian Health Service, tribal, and urban Indian clinics in Idaho, Oregon, and Washington; N = 259,281) and an extract of personal identifiers for visits between 5/15 and 9/19/2020 in Washington's RHINO system (N = 1,428,289). The datasets were matched using patient name, date of birth, sex, and zip code. After identifying matched records between the two datasets, we merged the results with a dataset of de-identified hospital visits between 5/15 and 9/15/2020. We analyzed this dataset to assess the effect of AI/AN misclassification on counts and rates for overall hospital visits and visits for selected CC and DD categories.

RESULTS

The linkage identified 9,443 misclassified records (i.e., records that matched with the tribal registry but had no indication of AI/AN race in the visit record). The majority (73.6%) of misclassified records were originally coded as White. During 5/15 to 9/15, misclassification underestimated the total visit count and rate for AI/AN in Washington by 36.6%. The effect of misclassification on counts for specific CC and DD categories varied. The percent changes in counts due to misclassification were lower for coronavirus diagnosis (17.6%), COVID-like illness (20.1%), and alcohol related visits (20.1%), and higher for suicidal ideation (38.8%), traffic-related (42.8%), and disaster-related mental health visits (46.5%).

CONCLUSIONS

Our findings indicate that over one-quarter of AI/AN hospital visits in Washington may be undercounted due to misclassified race information in the patient's medical record. Our findings contribute to the body of knowledge of misclassification of AI/AN people in health datasets, and can help inform the interpretation of syndromic surveillance data findings for the AI/AN population in Washington. These findings will be used to inform race/ethnicity data quality improvement efforts in Washington State and nationally.



JEWELL CL JOHNSON

Philadelphia Department of Public Health,
Philadelphia Department of Behavioral Health and Intellectual Disabilities

Jewell Johnson has been a substance use epidemiologist at the Philadelphia Department of Public Health and Department of Behavioral Health and Intellectual Disabilities since September 2019. Prior to her role in Philadelphia, Jewell worked as an injury epidemiologist at the Colorado Department of Public Health and Environment, where she assisted on projects examining trends of traumatic brain injuries and unintentional injuries associated with motor vehicle accidents. Jewell received her MPH from the Colorado School of Public Health in 2018 and while attending graduate school, worked as a crisis navigator at Community Reach Center in Westminster, Colorado.

#14669 Addressing Opioid Overdoses Among Non-Hispanic Black Individuals in Philadelphia, PA*

SESSION

Substance Use - Bridging Gaps: Reaching Vulnerable Populations

PRESENTATION

June 14 - 3:00pm

ABSTRACT

BACKGROUND

Opioid use has been a longstanding public health challenge in Philadelphia. Prior to April 2020, the majority of individuals who died from an unintentional opioid-related overdose were Non-Hispanic White. After this date the majority of opioid-related fatalities were Non-Hispanic Black.

METHODS

To prevent future opioid overdoses within the Non-Hispanic Black community, the Philadelphia Department of Public Health (PDPH) examined prior fatal opioid overdoses using Medical Examiner Office (MEO) data and National Violent Death Reporting System (NVDRS) data from 2016-2019 and applied the Haddon Matrix, a tool used to develop prevention initiatives for injuries, to identify the intersectionality of the event (non-fatal overdose), the host (the person), the agent (the drug), and the environment (physical and social). Chi-square analysis with a significance level of <0.05 was used to analyze differences by race/ethnicity. All analyses were conducted using SAS (Studio; NC).

RESULTS

Between 2016-2019, there were 864 Non-Hispanic Black individuals who died of an opioid-related overdose. Only 14% of Non-Hispanic Black decedents ($N=120$) had evidence of injection at the overdose scene, as compared to 35% of Non-Hispanic White decedents ($p<0.0001$). Similar to the other race/ethnicities, 51% ($n=445$) of Non-Hispanic black decedents had 3-4 substances detected in their toxicology tests ($p=0.4311$). Of the 864 Non-Hispanic Black decedents, 55% had cocaine detected compared to 40% of Non-Hispanic White decedents ($p<.0001$).

CONCLUSIONS

Review of MEO and NVDRS data and the application of the Haddon Matrix allowed for better understanding of the intersectionality between the event, the host, the agent, and the environment. Since Non-Hispanic Black decedents were most likely to die with both an opioid and cocaine on board, prevention initiatives that can address the social environment pre-event may include health advisories warning about fentanyl contamination of the cocaine supply. A post event prevention initiative can be initiating the host on Medication Assisted Treatment (MAT) and emphasizing cognitive behavioral therapy since there are no medications currently approved by the FDA to address stimulant use disorder. Furthermore, since PDPH could not determine intentionality (intentional use of speedball vs. fentanyl contaminated cocaine) it is important to prioritize interventions pre-event such as providing fentanyl test strips to people who use drugs. The Haddon Matrix is a valuable tool to help guide prevention initiatives to reduce future opioid overdoses within the black community of Philadelphia.



DYANNE HERRERA-VASQUEZ

Texas Department of State Health Services

Dr. Dyanne Herrera-Vasquez is an Epidemiologist for the Maternal and Child Health (MCH) Epidemiology Unit at the Texas Department of State Health Services. She received her PhD in Interdisciplinary Health Science from the University of Texas at El Paso and earned her Bachelor (Microbiology) and Master (MPH/Epidemiology) degrees from the University of Florida. Dr. Herrera-Vasquez's experience include: a two-year CDC/CSTE fellowship in Applied Epidemiology, working at the Arizona Department of Health Services (as an Epidemiologist and as Chief of Assessment and Evaluation), at Texas Tech University Health Sciences Center at El Paso (as a Lead Analyst and as Assistant Director for Institutional Research), and at the Tennessee Department of Health as a Surveillance Epidemiologist.

#14781 Infant Mortality in Texas: Using the Perinatal Periods of Risk (PPOR) Phase I and II Analysis*

SESSION

Chronic Disease / MCH / Oral Health - Chronic Disease / MCH / Oral Health Poster Presentations

PRESENTATION

June 13 - 11:00am

ABSTRACT

BACKGROUND

Texas Infant Mortality Rate was 5.5/1,000 live births in 2018 and remains below the national rate (5.7/1,000). However, racial/ethnic disparities persist. Using the Perinatal Periods of Risk (PPOR) analysis, we recommend areas for targeted prevention efforts by identifying specific causes of fetal-infant mortality and disparities.

METHODS

A retrospective cohort of Texas resident infants born in 2016 and died before reaching one year old was created using linked infant birth-death data. We used PPOR analysis to categorize all deaths by age at death (fetal, neonatal, post-neonatal) and birthweight (500-1499g, ≥ 1500 g) into four strategic prevention periods: Maternal Health/Prematurity (MHP), Maternal Care (MC), Newborn Care (NC), and Infant Health (IH). The control group included infants of non-Hispanic White women, ≥ 20 years of age, and with ≥ 13 years of education. Excess Feto-Infant Mortality rates (F-IMR) were calculated for each perinatal period among non-Hispanic Black, non-Hispanic White, Hispanic, and teen (ages 15-19) mothers. The periods with highest excess deaths were investigated further. Multivariate logistic regression was conducted to identify factors associated with excess deaths and calculate Population Attributable Risk Percentages (PAR%).

RESULTS

Non-Hispanic Black mothers had the highest excess F-IMR (7.5/1,000), compared to the control group and non-Hispanic White (1.3/1,000), Hispanic (1.5/1,000), and teen mothers (3.5/1,000). Excess deaths were primarily attributed to the MHP period among non-Hispanic Black (41%) and Hispanics (33%). For teen mothers, excess deaths were attributed to the IH (40%) and MHP (31%) periods. In the MHP period, excess mortality was primarily driven by high incidence of very low birth weight (VLBW) infants, which was attributable to multiple gestation (PAR%:25.4) and maternal weight gain < 15 pounds (PAR%:17.9). In the IH period, risk factors with greatest impact on infant death included Black race/ethnicity (PAR%:10.8), < 12 years of education (PAR%:10.3), not breastfeeding (PAR%:7.4), and inadequate prenatal care (PAR%:7.0). Sudden Infant Death Syndrome (SIDS) was the leading contributor to excess mortality among non-Hispanic Black and teen mothers.

CONCLUSIONS

The PPOR analysis demonstrated that prevention efforts may be most impactful by targeting racial disparities among non-Hispanic Black and Hispanic mothers and the MHP and IH periods, which contributed most to excess F-IMR. In the MHP period, high prevalence of VLBW births was the primary risk for excess deaths. In the IH period, SIDS was the leading contributor to excess mortality for non-Hispanic Black and teen mothers. Programming that promotes preconception and perinatal health to reduce VLBW births and SIDS may have the largest impact in reducing infant mortality.



LAUREN OSTRENGA

Louisiana Department of Health

Lauren Ostrenga is an HIV Epidemiologist at the Louisiana Department of Health HIV/STD/Hepatitis Program (SHHP). As a member of SHHP's Health Equity Action Team, her work has focused on identifying and addressing health disparities among racial and ethnic minorities as well as sexual and gender minorities disproportionately impacted by HIV and STDs. In addition, she has worked to strengthen data-driven decision making at SHHP through innovative data visualizations and communication. Prior to joining the Louisiana Department of Health, she received her Master of Public Health (MPH) in epidemiology from Tulane University.

#14820 Social Vulnerability Among New HIV Diagnoses in Louisiana*

SESSION

Infectious Disease V

On-Demand

Innovative Strategies to Address HIV Health Disparities

PRESENTATION

June 16 - 1:00pm

ABSTRACT

BACKGROUND

Social vulnerability describes the degree to which a person or community experience poverty, unemployment, access to transportation, and other factors that influence their capacity to respond to external stressors. Identifying communities that are more socially vulnerable can aid in outbreak preparedness and response planning for diseases like HIV, which disproportionately affects marginalized groups. Racial disparities in social vulnerability were assessed among new HIV diagnoses in Louisiana.

METHODS

Residence at HIV diagnosis was geocoded to the census tract-level among Louisiana HIV diagnoses from 2017-2019 and matched to the Centers for Disease Control and Prevention Social Vulnerability Index (SVI) database. The SVI ranks each census tract on 15 factors from the U.S. Census including poverty, education, housing, transportation, and minority status. Census tracts for the entire United States are ranked against one another. The tract rankings are based on percentiles with percentile ranking values ranging from 0 to 1 with higher values indicating greater vulnerability.

RESULTS

From 2017-2019, there were 2,868 new HIV diagnoses in Louisiana, of which, 2,515 (87.7%) had a geocoded address at HIV diagnosis classified as residential. Among HIV diagnoses with a geocoded residence, 416 (16.5%) lived in a census tract with a percentile ranking value of 0.9 or higher for overall social vulnerability as compared to 8.3% of the Louisiana total population. The majority of new HIV diagnoses and Louisiana residents with an overall social vulnerability percentile ranking value of 0.9 or higher were non-White, 92.3% and 77.3%, respectively. Among Louisiana HIV diagnoses, the median overall social vulnerability percentile ranking value for Whites was 0.38 as compared to 0.71 for non-Whites.

CONCLUSIONS

The percentage of persons newly diagnosed with HIV who live in census tracts with high social vulnerability was twice as high as the Louisiana total population. In addition, communities of color tend to experience higher social vulnerability than White communities and are disproportionately impacted by the HIV epidemic. With increased focus and effort to rapidly detect and respond to HIV clusters and outbreaks comes the need to identify socially vulnerable communities in order to ensure response efforts adequately address individual and community health needs.



MARIKO TOYOJI

Public Health - Seattle & King County

Mariko Toyoji, MPH is an epidemiologist at Public Health – Seattle & King County's Assessment, Policy Development and Evaluation Unit. She currently serves as the primary epidemiologist for the Communities Count program, providing social and health indicators, data and evaluation trainings and technical assistance to build community capacity in using public health data to advance local equity work. She has ten years of experience working in community health promotion, community engaged research and refugee and immigrant health. She holds a Master of Public Health degree in Health Services from the University of Washington.

#14901 Visibility for Equity: Disaggregated Data Provides Insights on Substance Use and Behavioral Health Disparities Among Asian American Youth in King County, WA*

SESSION

Substance Use - Bridging Gaps: Reaching Vulnerable Populations

PRESENTATION

June 14 - 3:10pm

ABSTRACT

BACKGROUND

In King County, Washington, Asian Americans are the second largest race/ethnicity group after non-Hispanic whites, comprising 18.5% of the county population or approximately 411,000 residents. Asian Americans have diverse cultural, linguistic and socioeconomic backgrounds—factors that impact health and quality of life. Population health data analyzed by an aggregate race category, such as “Asian”, can obscure health disparities, leading to critical needs for some populations going unseen and under-resourced. Disaggregated data is critical to achieving health equity and meeting the needs of a diverse community, especially in the areas of behavioral health services and substance use prevention.

METHODS

We generated weighted estimates and 95% confidence intervals (CI) for substance use and behavioral health indicators from the 2016 and 2018 Washington State Healthy Youth Survey (HYS) representative of 8th, 10th and 12th grade students in King County, WA. In 2016, the statewide school-based survey, HYS started collecting disaggregated data for seven Asian ethnic subgroups. Estimates were stratified and analyzed by major race/ethnicity categories (American Indian and Alaska Natives, Asian, Black, Hispanic, Multiple Race, Native Hawaiian and Pacific Islanders, other and white), and Asian ethnic subgroups (Asian Indian, Cambodian/Khmer, Chinese, Filipino, Japanese, Korean, Vietnamese and other) for comparison.

RESULTS

Disaggregating data by ethnic subgroups showed substantial variability among Asian American youth across a suite of substance use and behavioral health indicators. For example, when analyzed by major race category Asian American youth in King County had a current vaping rate of 7.6% (95% CI: 6.8%-8.6%), significantly lower than the King County average of 13.5% (95% CI: 12.5%—14.4%). Among Asian ethnic subgroups, current vaping rates for Cambodian/Khmer 13.9% (95% CI: 10.6%—18.0%), Filipino 14.1% (95% CI: 12.2%—16.2%), Japanese 12.4% (95% CI: 10.4%—14.8%) and Korean 10.4% (95% CI: 8.5%—12.6%) youth were not significantly different than the King County average. However Indian 7.2% (95% CI: 5.8%—9.0%), Chinese 7.2% (95% CI: 6.0%—8.6%) and Vietnamese 7.7% (95% CI: 6.2%—9.5%) youth had rates significantly lower than the county average. Findings for other substance use and behavioral health indicators showed similar patterns of variability.

CONCLUSIONS

Examining rates for Asian American youth as an aggregated category obscured behavioral health and substance use disparities observed when rates were disaggregated by Asian subgroups. Disaggregated data provides communities, public health practitioners and policy makers with information that better represents and brings attention to diverse populations and can inform culturally and community centered strategies to promote health and address disparities.