Inclusion of Industry and Occupation Questions into COVID-19 Case Data Collection

Monday, June 14, 2021

3:20 PM - 3:30 PM

Virtual

BACKGROUND:

The COVID-19 pandemic has exacerbated existing health and socioeconomic disparities between those deemed “essential workers” and higher paid workers able to work remotely. Due to the nature of their work, essential workers have been required to report to the workplace throughout the pandemic including during times of lockdown, making the workplace a primary exposure site for many COVID-19 cases in the early months of the pandemic. Many are at increased risk of exposure to SARS-coV-2 due to inability to socially distance, insufficient PPE, job instability, and workplace culture of non-adherence to infection prevention measures. While employment information is not typically collected during infectious disease case investigations, our team championed inclusion of Industry and Occupation (I/O) variables into routine COVID-19 case surveillance, based on NIOSH/CSTE Occupational Surveillance Subcommittee recommendations.

METHODS:

We examined existing variables related to occupation in our online case surveillance database (NC COVID) and found them to be insufficient to inform prevention. We added standard I/O questions (“Occupation,” “Employer name,” and “In what kind of business or industry does the person work?”) per NIOSH recommendations as free text fields and provided a brief training to local health departments on the importance of these variables. COVID-19 data (March 1, 2020 – December 31, 2020) were extracted from NC COVID and analyzed in R for completeness of employment information.

RESULTS:

I/O data have been collected for 32% of COVID-19 cases. Industries with the highest number of outbreaks are meat processing (N=41), manufacturing (N=88), and government services (N=90). Cases working in meat processing

and manufacturing industries had a greater percentage of non-white (56% and 38%, respectively) and Hispanic/ LatinX (47% and 33%, respectively) workers than the North Carolina general population (33% non-white, 10% Hispanic/ LatinX).

CONCLUSIONS:

Having more complete occupational data on COVID-19 cases is essential to preventing its spread, mitigating disparities, and prioritizing vaccine distribution among essential workers. Collaborations between occupational health and infection prevention staff for COVID-19 pandemic response are leading to a better understanding of the effects of occupation on health. With competing priorities for data collection, gaining approval from NC DHHS leadership for adding I/O questions to COVID-19 case surveillance was crucial to our success. Because of leadership support, we were able to add workplace clusters, categorized according to North American Industry Classification System (NAICS), to the weekly COVID-19 cluster reports. Future steps include enhancing case follow-up to improve data quality and completeness of I/O variables.

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