

16-CC-01

Committee: Cross Cutting, Health Disparities**Title:** Use of Area-based Socioeconomic Status to Generate National Data on Health Outcomes with Proposed Healthy People 2030 Objectives for Which Individual Socioeconomic Status Data are Not Routinely Collected**I. Statement of the Problem:**

- A goal of Healthy People (HP) 2020 is to eliminate health disparities and achieve health equity. This goal will likely be continued in HP 2030.
- HP 2020 Public Health Infrastructure Objective 7.3 is to increase the proportion of population-based HP 2020 objectives for which national data are available by socioeconomic status, in particular by individual education level or by individual/household income (1).
- Many of the HP 2020 objectives for which population-based national data are lacking are health outcomes for which data are collected at the state or local level through disease reporting: selected malignancies, infectious diseases, diseases due to environmental exposure (e.g., elevated blood lead levels), birth outcomes and deaths. Individual SES data are not usually collected for these diseases but residential address information is, making it possible to geocode the addresses, link them to SES data at the census tract level, and describe the epidemiology of these conditions by census tract-level SES status (2).
- Some of the population-based data underlying HP 2020 objectives are from sentinel surveillance systems: incidence data for seven foodborne pathogens (HP Objectives FS-1.1-1.7) come from the CDC Emerging Infections Program (EIP) FoodNET data (based on data from 10 states), and for four acute bacterial pathogens (invasive meningococcal disease, *Haemophilus influenzae* disease, neonatal Group B Streptococcal disease and healthcare-associated MRSA, HP 2020 Objectives IID-2-4 and HAI-2) come from CDC EIP Acute Bacterial Core surveillance (ABCs, based on data from 10 states).
- Recently, three projects have demonstrated the feasibility and potential importance of generating national level data using census tract SES measures. Beginning in 2010, as part of the National HIV/AIDS Strategy for which one of the 3 overarching goals is to “reduce HIV-related disparities and health inequities,” the HIV Division at CDC has funded up to 29 state and local health departments to geocode HIV case data, link it to a number of census tract SES measures and send them to CDC. This has resulted in several reports that describe disparities by census tract-level SES measures collectively (national estimates) and by contributing site (3-5). Beginning in 2011, in an effort to describe cancer incidence by SES, the North American Association of Central Cancer Registries (NAACCR) encouraged all US cancer registries to assign a code to each cancer diagnosis based on the poverty level of the census tract of residence going back to 1995 and send their cancer surveillance data including this code to NAACCR. Since then, among the analyses conducted using these NAACCR data is one describing the relationship between area poverty and site-specific cancer incidence in the US, based on data from 16 states and Los Angeles County (6). In 2013, the 10 CDC-funded EIP sites, which are national sentinel systems for a number of acute bacterial, vaccine-preventable and foodborne diseases, established a Health Equity Workgroup which developed guidelines for geocoding all EIP-generated surveillance data (7). EIP sites are now geocoding data and linking it with census tract, and have established the precedent for infectious diseases beyond HIV of sending census tract identifier to CDC to match with census tract-level SES measures. One analysis of data from all EIP sites has been completed (influenza hospitalizations), and recently was published in the *MMWR* (8).

- Therefore, the potential exists to replicate these precedents using other HP 2020 conditions for which there are national reduction objectives and no individual SES data. A recent CSTE assessment determined that, while few states collect or are prepared to collect case data by individual SES, at least 26 states have a plan for routine geocoding of all reportable health outcomes and that, depending on the reportable condition, from 19-30 states are already geocoding all case reports (9). This includes all conditions for which sentinel national surveillance is conducted by the 10 CDC-funded EIPs (which comprise FoodNet and ABCs among the scope of surveillance they conduct).
- To expand the number of reportable health outcomes for which a sentinel system of willing and representative state participants would geocode reportable disease/health outcome data and include census tract of residence with the data routinely sent to CDC would require commitment, coordination and, possibly, some supportive funding for the work of geocoding and linking to census tract from the relevant CDC programs.
- In addition, use of census tract SES measures in lieu of individual ones for monitoring HP 2020 and HP 2030 objectives would need to be accepted by CDC and the National Center for Health Statistics (NCHS). NCHS is the agency that monitors progress toward achieving HP 2020 PHI Objective 7.3 and any similar future HP 2030 PHI Objectives. In the current description of SES measures in HP 2020, only individual education level and family income are mentioned and accepted as SES measures by which to describe national objectives (10).

II. Statement of the desired action(s) to be taken:

CDC and NCHS convene a workgroup that includes, among others, representatives from the HIV Division, the EIP, the NAACCR, the National Association for Public Health Statistics and Information Systems (NAPHSIS), CSTE and states that have participated in the HIV and EIP projects cited above, to:

1. determine whether use of census tract-level SES data provided by a sample of states would fill the need for national SES data for HP health outcomes lacking individual SES data; and if yes, to come to agreement on:
 - a. what census tract-level SES variable(s) should be used to provide the needed data; and
 - b. standards for geocoding, analysis and presentation of national level data by census tract-level SES.
2. develop a proposal for the HP 2030 goal to eliminate health disparities and achieve health equity to include at a minimum:
 - a. inclusion of census tract-level SES data provided by a sample of states as a valid population-based SES measure for health outcomes with HP 2030 objectives for which individual SES data are not collected but case residential address data are;
 - b. what census tract-level SES variable(s) should be used to provide the needed data; and
 - c. standards for geocoding, analysis and presentation of national level data by census tract-level SES.

III. Public Health Impact:

- 1) Establish national baseline information and standards to identify health disparities and inequities by social determinants of health which can lead to directed efforts to reduce and eventually eliminate them, ultimately contributing to achieving health equity.
- 2) Progress toward the Healthy People 2030 goal of eliminating health disparities and achieve health equity by description of priority health outcome reduction objectives by census tract SES measures and by having standards for producing national level data by census tract-level SES.

IV. Revision History

V. References

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