# State Health Official Career Advancement and Sustainability Evaluation—Description of the Methods Used in the SHO-CASE Study

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#### ABSTRACT

State health officials (SHOs) lead state governmental public health agencies, playing an important role in their states. However, little comprehensive research has examined SHOs or characteristics of these leaders, limiting evidence about ways to improve SHO selection and subsequent performance. This brief describes the methods of the SHO-CASE study focused on current and former SHOs in state public health agencies. Methods used include qualitative components that informed the development of survey questions, survey administration, and survey response. A total of 147 SHOs responded to the SHO survey representing every state and Washington, District of Columbia. The SHO-CASE study survey database represents the most comprehensive database of its kind regarding a range of attributes of current and former SHOs. These data can be used to explore factors contributing to SHO success including valuable insights into effectively working with the states' elected officials.

KEY WORDS: leadership, public health, public health workforce, state health official

S tate health officials (SHOs), the leaders of state governmental public health agencies, play an important role in their states. Tasked with formulating and influencing public health policy and

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ensuring excellence in state-based public health practice, SHOs set priorities for their agencies.<sup>1</sup> Such priorities guide managers and the frontline workforce in executing programs, policies, and activities that affect the health of the state's population.

Much of what is known about SHOs is from the Association of State and Territorial Health Officials (ASTHO) Profile Surveys and data collected by the Public Health Foundation about state public health agencies. ASTHO Profile Surveys began in 2007 and are conducted approximately every 3 years, providing valuable cross-sectional data about agencies and SHOs in office at the time of the survey. The 2016 Profile Survey reported that SHO tenure was highly variable and ranged from 2 months to nearly 15 years, with an average tenure of 2.7 years and a median of 1.7 years.<sup>1</sup> In addition, the survey provides data on who appoints SHOs, SHO educational attainment, salaries, and experience in public health prior to serving as an SHO. However, numerous SHOs are not represented by these data, as the surveys cannot account for SHOs who join or leave their positions between survey points or SHOs who served prior to 2007 when the first Profile Survey was conducted. Beyond these descriptive data, very little comprehensive

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research has examined the SHO role or characteristics of these leaders. Some commentaries<sup>2,3</sup> and anecdotal reflections from previous SHOs<sup>4</sup> have been published along with one recent paper on how SHO tenure has changed within states over time.<sup>5</sup> However, to date, no empirical studies have examined factors associated with SHO success, factors associated with SHO turnover, or the competency needs of SHOs from different backgrounds. Despite the potentially far-reaching implications of SHO leadership, relatively little is known about the leaders of state public health agencies. To begin to fill in some of these gaps, the State Health Officials Career Assessment Sustainability Evaluation (SHO-CASE) study was initiated in 2016.

The purpose of the SHO-CASE study was to build an evidence base for factors that might improve SHO selection and subsequent performance. The current article describes the methods of the SHO-CASE study and the survey used to collect information from current and former SHOs.

## Methods

#### **Population studied**

To systematically identify SHO attributes and factors, 2 distinct populations were studied. These included current state and territorial health officials (together referred to as SHOs in our study) and former SHOs. During the study period, it was possible to be recruited as a current SHO but be transferred to the former SHO cohort if undergoing a change in employment status.

#### Focus group sessions to inform survey development

Eleven current SHOs in attendance at the 2016 ASTHO Annual Meeting participated in a focus group with the research team. Three questions were asked: (1) What would you say your most significant accomplishment has been? (2) What personal and/or professional factors (or background/experience) most contributed to those successes? and (3) What do you wish you would have known prior to your current position as an SHO that could have made a difference in your success?

In addition to the focus group, several additional components of qualitative data were collected through a modified Nominal Group Technique at the 2016 ASTHO Alumni Association Meeting's alumni breakfast. The purpose of this exercise was to gather additional insight into the development of potential survey questions from current and former SHOs. Color-coded note cards were used to distinguish responses from members of the 2 groups. Current SHOs were asked to describe what they need to consider their SHO tenure successful. Former SHOs were asked the following: (1) Among the attributes you brought to the SHO position (eg, personal, education, experience), what were the most valuable? (2) What was the most important lesson you learned as an SHO?

#### Survey development

Insight from participants at the 2016 ASTHO Annual Meeting led to the development of a question bank comprising 146 potential survey questions and closedended responses. From this list of potential questions, a subset of questions was selected by members of the SHO-CASE study team.

The SHO-CASE study employed 2 surveys in total, a primary survey and a follow-up survey. Two versions were created of each survey (one for current SHOs and the other for former SHOs) (see Supplemental Digital Content Appendices A-D, available at http://links.lww.com/JPHMP/A551). While the core components of the questions remained the same, past tense questions were asked of the former SHOs whereas present tense was used for the current SHOs. The former SHO surveys also included questions on transitioning from an SHO career and next steps into a new professional role or retirement—questions that were not yet relevant and therefore not included in the current SHO survey.

For both current and former SHOs, the surveys assessed attributes and perspectives on their successes and challenges. The primary survey was designed to be brief with multiple-choice responses and to take approximately 15 to 20 minutes to complete. The goal of the primary survey was to obtain broad responses from the largest group of respondents possible; therefore, this survey was designed to be both short and concise. Identifying information such as name and state of SHO service was collected from respondents.

The follow-up survey was designed to probe for more in-depth responses about SHO experiences and included numerous open-ended questions. Respondents to the primary survey were asked whether they would consider participating in the follow-up survey. They were informed that the follow-up survey would be longer, with open-ended questions, and may take nearly an hour to complete in order to probe on particular topics of interest.

Draft versions of the primary and the follow-up surveys were pilot tested by 5 current and 5 former SHOs to assess readability, clarity, and face validity. In addition, those pilot testing the survey were asked to provide any additional feedback or concerns they had about any items on the surveys.

## Survey implementation

Surveys were conducted electronically via Survey-Monkey. Data collection occurred from March to September 2017. ASTHO took the lead role initially in promoting the primary survey among its members. Invitations were sent via ASTHO's electronic newsletters and direct e-mails starting in March 2017. Specifically, ASTHO included the current SHO primary survey invitation and the link to the survey in its monthly member e-mail newsletter. Following that initial invitation in the monthly member newsletter, current SHOs were sent direct e-mails by the study's principal investigator inviting them to complete the primary survey if they had not done so already. Similarly, the 203 former SHOs on ASTHO's alumni list were sent the primary survey for former SHOs. The 192 with working e-mail addresses were directly e-mailed an invitation letter and electronic primary survey link. A total of 21 of the 203 former SHOs were mailed paper copies of the survey, as ASTHO only had postal addresses for these individuals. ASTHO also invited former SHOs to participate in the primary survey via its monthly alumni e-mail newsletter starting in May 2017 and on alumni conference calls. ASTHO also worked with its regional representatives to promote the primary survey to SHOs in their respective regions. A total of 29 surveys (26.9%) were completed by mail or telephonically for those who expressed this preference. Participants who completed the primary survey were asked whether they were also willing to participate in the follow-up survey either electronically or by telephone at a later date. Telephone interviews for the followup survey were conducted by 1 of 3 CITI-certified research team members. If participants opted for the telephone interview, the project coordinator arranged for an interviewer to contact them. After each call, interviewers entered the responses into the corresponding electronic follow-up survey.

The institutional review board of Indiana University granted ethical approval for this study.

# Survey response

A total of 51 current SHOs responded to the primary survey from the 59 total states, territories, and Washington, District of Columbia, for an 86.4% response rate. Of 203 former SHOs invited to participate in the survey, 47.3% (n = 96) responded to the primary survey. The follow-up survey had a 74.0% (108/147) overall response rate including 34 current and 74 former SHOs. Either a current SHO or a former SHO from every state and Washington, District of Columbia, is represented in the survey data. Three of the 8 US territories and freely associated states are also

# **Implications for Policy & Practice**

- The SHO-CASE study has created a unique database designed to explore factors contributing to SHO success such as valuable insights into the approaches to effectively working with the states' elected officials, which often contribute to success in implementation of health initiatives and potential for longer SHO tenure.
- Findings from the SHO-CASE study may be critical to informing the career pathways/opportunities of individuals studying in medicine, nursing, public health, or public administration who may consider serving as an SHO. By providing a better understanding of leadership opportunities of SHOs, the pipeline of potential state health leaders who are prepared to lead the complexities of improving the health of states and territories may be enhanced.
- Findings from the SHO-CASE study are currently being implemented in the design of a new ASTHO Leadership Institute and are informing the development of competencies, education, and training of new SHOs. In addition, survey results will be used to identify exemplary former SHOs who can serve as mentors to new SHOs.

represented. Responses represent SHOs who served at various points throughout the period of 1973 through 2017.

# Discussion

The SHO-CASE study represents the most comprehensive database of its kind regarding a range of attributes of current and former SHOs. A high number of current and former SHOs contributed vital information about themselves, resulting in an exceptionally high response rate of 86% among current SHOs. Data from this study can be used to answer numerous inquiries about SHOs. The forthcoming body of research will contribute valuable new insights that can inform individuals who appoint SHOs and transition teams and will contribute to the creation of resources and learning experiences to enhance the success of this key member of the nation's public health workforce. Two related SHO-CASE studies are published in this issue of the journal. For more findings from this work, see "State Health Officials: Backgrounds and Qualifications"6 and "Public Health Senior Deputy's Perceptions of State Health Officials Success Factors: Professional Characteristics, Personal Attributes, and Signs of Derailment."7

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