Despite the toll of coronavirus disease 2019 (COVID-19) on health care workers, the United States lacks an effective way to track and evaluate COVID-19–related illness, deaths, and mental health effects in this group, warns a rapid expert consultation from the National Academies of Sciences, Engineering, and Medicine.

In the 10-page document, a panel of experts identified deficiencies in current resources and methods for tracking and evaluating COVID-19–related deaths of workers in health care settings and suggested possible strategies to address these gaps. The report noted that such deaths include those resulting from direct occupational exposure to severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) and deaths that “reasonably” could be attributed to conditions exacerbated by COVID-19, such as suicides among health care workers fueled by fatigue, stress, or burnout.

The panel noted that underreporting of risks to health care workers is especially likely during public health emergencies—a problem that is playing out in the COVID-19 pandemic—and described several factors that hinder tracking of COVID-19–related health care worker deaths.

For example, on its COVID Data Tracker web page, the Centers for Disease Control and Prevention (CDC) reported 786 health care worker deaths attributable to infection with COVID-19 as of November 3, 2020. However, in compiling information about infections in this population, the CDC currently relies on coronavirus case report forms that typically are collected by local health departments. Queries about health care worker occupation type and job setting were not added to these forms until May 2020. Such data are still often missing.

As a result of such omissions, only 22% (571,708) of 2,633,585 US COVID-19 cases reported to the CDC from mid-February to mid-July of 2020 had information about occupational status; among those cases, 100,481 patients (18%) were described as “health care personnel.”

Furthermore, states vary in their standards for reporting of occupational data; some lack any information about COVID-19 deaths by profession, and others report data on health care workers only in certain settings, such as hospitals but not nursing homes. Jurisdictions also vary considerably in completeness of reported data.

Also lacking is a national system or reporting standards for measures of COVID-19–related morbidity, including effects on mental health, such as prevalence of burnout and suicide.

The panel cited a March 2020 study of health care workers on the front lines of China’s COVID-19 crisis that found significant numbers of workers coping with mental and psychological effects, including anxiety, depression, and insomnia. Similarly, a survey of 1557 health care personnel who worked during the 2003 SARS outbreak in Toronto found that one-third reported levels of posttraumatic stress symptoms comparable to those of survivors of a large-scale natural disaster.

“The absence of a uniform national framework and inconsistent requirements across states for collecting, recording, and reporting [health care worker] mortality and morbidity data associated with COVID-19 impairs anyone’s ability to make comparisons, do combined analyses, or draw conclusions about the scale of the problem,” the report noted.

The panel proposed steps that could be taken to address these gaps, including having an effective national data reporting system in place to collect data on where the infection occurred and factors such as circumstances and interventions that may boost or lower risk. This approach, the
report said, would support “the adoption of effective mitigation strategies and policies to reduce COVID-19 mortality and morbidity” in health care personnel.

The panel cited a September 2020 National Academies report on tracking mortality during large-scale disasters, including pandemics, as having lessons that may be relevant to COVID-19. In addition, epidemiological studies on such risk factors as face-to-face contact with patients with COVID-19, the availability and use of personal protective equipment (PPE), and masking requirements of institutions could also inform policy and practice, the report noted.

The panel pointed to universal masking in health care settings as a way to support the safety and well-being of health care personnel during the pandemic. Evidence from 2 large studies shows that universal masking of health care staff and patients is an important factor in protecting health care workers from infection.

In addition, multiple studies “have consistently shown that access to appropriate PPE benefits the mental health of the health care workforce, as reflected in improved job satisfaction, higher levels of readiness, increased feelings of confidence and safety, diminished fear of acquiring the infection and passing it on to loved ones, and lower overall levels of distress and anxiety,” the panel wrote.

Although the rollout of coronavirus vaccines and prioritizing initial distribution to health care workers is anticipated to substantially reduce the physical risks that SARS-CoV-2 poses to the health care workforce, the toll on workers’ mental health will be an ongoing concern that will require better tracking of the pandemic’s long-term effects on this group. Moreover, systematic improvements suggested by the panel might be expected to enhance preparedness to address the effects of future pandemics on health care workers.

“A comprehensive, integrated national data tracking and reporting system coupled with well-designed, focused epidemiological assessments such as those described here, could help identify more effective measures to protect the health and well-being of the health care workforce,” the panel said.