have shifted from defeating local legislation to suppressing local stakeholders—taxpayers and their representatives—from being able to cast a vote on SSB taxes. They have done so by pouring tens of millions of dollars into state legislation that preempts communities from deciding for themselves if they would like SSB taxes. Preemption is a strategy long used by the tobacco and firearms industry to prevent local antismoking laws and restrictions on firearms.[5]

Michigan, Arizona, and now California and Washington have preempted local SSB taxes. In California, home of the nation's first SSB tax, this was achieved by what lawmakers characterized as "blackmailing," holding "hostage," and sending a "ransom note" to Californians (https://nyti.ms/2ItStDX). These California lawmakers were describing how beverage companies spent millions on a ballot measure that could make it difficult for cities to function, and then offered to drop the initiative if lawmakers put a moratorium on local SSB taxes, which lawmakers did. In Washington, state preemption of local SSB taxes passed under the guise of a "Yes! To Affordable Groceries" ballot measure and more than $20 million in beverage industry funding for the measure (https://nyti.ms/2RuUjte).

Cities have long been the drivers of public health policy innovation, experimenting with strategies and generating evidence to inform policy scale-up. State preemption of health policies not only hinders consumer and government stakeholders from making decisions that directly affect their communities, it also slows scientific progress in understanding policy effects.

However, in states like California, preemption may ultimately hasten the scaling up of SSB taxes. Just days after California's moratorium on local SSB taxes, the California Dental Association and California Medical Association filed a 2020 ballot initiative for a statewide tax. SSB taxes are additionally supported by the American Heart Association, the American Cancer Society, the American Public Health Association, and other prominent health groups. Rigorous evaluations of SSB taxes should continue at all levels, and a state tax would provide a unique opportunity to evaluate an SSB excise tax that cannot easily be avoided by crossing into another jurisdiction.

CONCLUSION

Modeling studies play an important role in predicting long-term outcomes of SSB taxes and in understanding distinct stakeholder perspectives, especially in an environment where SSB taxes and their evaluations may be rarer as a result of preemption. The CHOICES Project (http://choicesproject.org) has modeled the cost-effectiveness of SSB taxes at local, state, and federal levels,[6] providing practical tools for decision-making. Likewise, the microsimulation study by Wilde et al. makes another important contribution to a growing body of literature that can help voters and policymakers make evidence-based decisions on future SSB taxation and preemption. AJPH

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Challenges and Opportunities for Modernizing the National Violent Death Reporting System

See also Haas et al., p. 255.

In this issue of *AJPH*, Haas et al. (p. 255) describe an effort to improve the coding of self-identified sexual orientation and gender identity (SOGI) status among decedents in the National Violent Death Reporting System (NVDRS). As they illustrate, this is no easy task. Unlike most public health surveys for which living respondents can be queried, the NVDRS reporting process begins at death. Vital registrants at the local level are dependent on reports from law enforcement, coroners or medical examiners, social media and newspapers, and interviews with proxy reporters to piece together the victim's SOGI status at the time of death.

We heartedly agree with the authors that the public health need for this information cannot be underestimated.[1,2] Over the past two decades, numerous studies have documented elevated risk for violent death among SOGI minorities arising from suicide attempts, depression, and antigay and antitransgender violence and victimization. But, as they note, linking the greater risk to reveal the burden of violent

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deaths in the SOGI-minority population is greatly hampered by our current data systems.[3,4]

Although the NVDRS offers a different route to obtain this information, compiling individual records in the NVDRS is both labor-intensive and prone to difficulties in data collection in part because of differences in state approaches. As one example, some public health departments code gender status in the NVDRS for transgender decedents as birth sex while others use gender at time of death. Furthermore, many SOGI-minority victims are undetectable if the circumstances surrounding their deaths do not include SOGI-related themes.

Improved SOGI data collection can occur with enhanced ability of the National Center for Health Statistics to modernize the National Vital Statistics System. This can be done by focusing on six areas of transformation:

1. facilitating interoperability,
2. employing advanced technology,
3. developing standards,
4. achieving federation of the system,
5. expanding the reach of the NVDRS to all 50 states and the District of Columbia, and
6. harmonizing vital registration jurisdictional laws and statutes.[5,6]

Although training funeral directors, medical examiners, and coroner groups to code SOGI-related information is useful, it cannot match the gains that would come from developing an electronic data collection system that electronically populates the death report with information from electronic health records (EHRs) and other databases. This would serve to reduce human error, improve the precision of medical histories feeding into the death record, and reduce reluctance or inability to ask and code SOGI-related questions. Furthermore, it would provide a mechanism for individuals to share self-identification of SOGI status regardless of the ultimate circumstances of their deaths. Including SOGI status ascertainment in the EHR and along with increased interoperability among the medical examiners, law enforcement investigators, funeral home systems, and coroners' case management systems would decrease staff burden, assist with the timeliness of completing the data record, and enhance the accuracy of identifying risk factors for violent death more generally.

But interoperability will only work well if there are standards and procedures that both protect confidentiality and enhance accuracy when capturing and sharing SOGI status in the mortality record. Standards are needed to address classification systems, terminologies, and data interchange among localities, states, and the Centers for Disease Control and Prevention. In addition, standards will require establishing a fixed set of core questions for ascertaining SOGI status and the circumstances of the death. Standards ensure that the documentation in the death record will be transportable and a bridge for the different professions involved in the collection and use of the data. Most importantly, development of standards for privacy, confidentiality, and security of the SOGI data that meet the requirements of local jurisdictions and statutes is critical. This will be difficult but not impossible.

Further complicating the process is that SOGI status is not necessarily a fixed identity and where, when, or if a person is willing to disclose such information in the EHR or other databases has yet to be fully determined. As well, standards will need to include flexibility for coders to update terminology and coding standards should evolving language and intersectionality of SOGI-related self-identification create changes in terminology. Improvements in the use of technologies may also ease the burden of data collection, such as the development of autopopulation of death records or mobile applications to interface with both the EHR and other linked databases.[6]

The ability to employ advanced technology within states will require congressional and Health and Human Services assistance, likely with incentives similar to those used to facilitate the roll out of EHRs nationally. Presently, many vital systems are underfunded and unable to upgrade their reporting capacities without such assistance.[5] While modernization will go a long way in enhancing the accuracy and usability of mortality data, it is also important that reports from all 50 states and the District of Columbia are incorporated into the NVDRS system. Many of the missing states contain significant numbers of racial and ethnic minorities for whom violent death from homicide, suicide, and legal interventions are a significant public health concern. The public health mission demands that the factors associated with these deaths must be better captured.

While incentivizing will help to bring all 50 states and the District of Columbia into alignment in a federation, this goal also requires thoughtful governance approaches. In a recent convening of relevant stakeholders, including one of the authors, the National Committee on Vital and Health Statistics recommended development of business models that could help achieve the transformation of the National Vital Statistics System.[5] Modernization of mortality data means not only fixes to the NVDRS but also enhancing the National Death Index, an important but costly resource for researchers. Although there is much to do here, there are successful models. As an example, California passed the Revitalization of Vitals legislation and Respect After Death Act directing its vital record system to make it easier for individuals to change their sex on their birth certificates and to have their current gender identity on their death certificate. Other states have developed similar legislation but there are also some states that, despite a willingness to make changes, are unable to do so without additional funding to reengineer existing systems.

One of the important lessons learned from the current opioid crisis is that an absence of linked electronic interoperable systems served to blind us to the emerging patterns of homicides and suicides connected to opioids until there were way too many deaths. Modernization of the National Vital Statistics System would also allow it to transition to a near-real-time system of mortality surveillance fulfilling its public health function of being an early detector of emerging public health epidemics, such as the rising suicides and legal interventions in African Americans and homicides in transgender women of color.[2] While we write in response to the matters raised in the article on SOGI measurement in the NVDRS, we note that modernization of the National Vital Statistics System would bring critical public health benefits to many segments of society. AJPH

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E-cigarettes Are Being Marketed as "Vitamin Delivery" Devices

Scientists continue to debate the relative risks and benefits of e-cigarettes relative to combustible tobacco.[1] However, several e-cigarette companies are advertising their products as "vitamin delivery devices" and "weight management aids" for appetite reduction. During our ongoing research on tobacco-related marketing, we have observed several e-cigarette companies making unsubstantiated claims that their products provide health benefits including an improved immune system, better sleep, and increased energy.

Table 1 contains a list of some of some of the claims being made by brands such as VitaCig, VitaminVape, Vapor4life, VitaStik, and NutroVape. For example, VitaCig, on its company's Web site, claims that its products contain herbal supplements associated with appetite suppression, including hoodia and konjac root; however, there is no scientific evidence to conclude that inhaling these supplements is safe or that it results in appetite suppression. Vapes intermixes ads for "fruity e-juices" containing up to 24 milligrams of nicotine with ads for e-cigarette kits with vitamins, which could lead people to associate vaping with keeping a healthy lifestyle.

Furthermore, companies are promoting e-cigarettes along with vitamins and herbal supplements in the absence of scientific evidence that inhaling these substances confers health benefits. Davinci, a vaporizer manufacturer, states on its Web site that vaping of herbs such as chamomile may have salubrious effects akin to drinking chamomile tea; however, future research is required to establish whether inhaling chamomile confers the same effects as drinking it.

VitaminVape, VapeFully, VitaStik, and NutroVape sell devices that resemble e-cigarettes but claim that they are nicotine-free and that they deliver vitamins and nutrients. NutroVape claims that its devices deliver "nutritional supplements," and VitaminVape directly implies that the effects of inhaling B_{12} are similar to the effects of a B_{12} injection. Consumers may see these health claims and assume that e-cigarettes, including those containing nicotine, are health enhancing. No known research has demonstrated that e-cigarettes have health benefits relative to not inhaling any substances.

VapeFully claims that one of its products contains blends with lavender, suggesting it can have "healing effects." Davinci's Web site advertises a lavender product, stating that it is intended for migraine relief, pain, insomnia, anxiety, depression, relaxation, and sexual energy despite evidence contradicting such conclusions about lavender.[2] A recent study noted that 23 unique patents have been filed introducing e-cigarette delivery of weight-loss constituents,[3] and therefore this area of research deserves investigation.

It is currently unclear whether inhaled vitamins or supplements are equivalent to those that are ingested. If they are prescribed to treat medical conditions (e.g., migraines) and weight loss, they are considered a medicine rather than a food. Per the Food and Drug Administration (FDA), the standard of proof is different because drugs must first prove safety, whereas foods and dietary supplements are "considered safe until proven unsafe" (http://bit.ly/2SiHBOz). Alternatively, if these products are meant to be dietary supplements, the FDA has the power to take regulatory action after they enter the marketplace; thus, because such products do involve an unreasonable risk of illness or injury, the FDA should intervene. Any product containing e-liquid or enabling vitamin inhalation should be evaluated by the FDA.

The 2009 Tobacco Control Act requires the FDA to consider the health impact of regulatory actions on nonusers of tobacco and gives it the authority to regulate false and misleading statements used to advertise these products.[1] By associating their products with vitamins and

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