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BRIEF REPORT

The enforcement of statewide mask wearing mandates to prevent COVID-19 in the US: an overview [version 1; peer review: 2 approved]

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Abstract

Face masks have become the bulwark of COVID-19 prevention in the US. Between 10 April and 1 August, 2020, 33 state governors issued orders requiring businesses to require their customers and employees to wear face masks, and persons outdoors who could not social distance to do the same. We documented the policies and enforcement actions for these policies in each of the states. We used governors' orders and journalists' news reports as our sources. Our results show that the states used a variety of state and local (county and municipality) agencies to enforce business prevention behaviors and primarily local law enforcement agencies to enforce outside mask-wearing behaviours. In particular, law enforcement officers demonstrated a strong preference for educating non-mask wearers, and indicated a reluctance to resort to civil penalties that were enacted in the state orders. Businesses expressed a preference to have government agencies enforce non-mask wearing behaviours. But there was also a widespread reluctance on the part of local law enforcement to resort to legal remedies.

Keywords

COVID-19, face masks, statewide mandates, governor's order, enforcement

This article is included in the **Emerging Diseases and Outbreaks** gateway.

This article is included in the **Coronavirus** collection.

Open Peer Review

Approval Status

	1	2
version 1		
07 Sep 2020	view	view

1. **Evelyn Forget** , University of Manitoba, Winnipeg, Canada
2. **Hina Shah**, Kansas Health Institute, Topeka, USA
Charles Hunt, Kansas Health Institute, Topeka, USA

Any reports and responses or comments on the article can be found at the end of the article.

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Author roles: **Jacobs P:** Conceptualization, Data Curation, Formal Analysis, Investigation, Methodology, Project Administration, Resources, Supervision, Validation, Writing – Original Draft Preparation, Writing – Review & Editing; **Ohinmaa AP:** Data Curation, Methodology, Software, Validation, Visualization, Writing – Review & Editing

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Introduction

In the United States, the Centers for Disease Control first recommended the wearing of face masks on April 3, 2020. On April 8, The Governor of New Jersey was the first to issue a general, statewide mandate, which required “workers and customers to wear cloth face coverings while on the premises”. By August 1, 33 state governors had issued state-wide mask wearing orders. The resulting pattern of regulations regarding mask wearing across the states is a welter. There is wide variation in the design of the ordinances, including whose behavior is being targeted, what is expected of them, when they must observe the ordinances, where their behavior is to be regulated, why they must submit to these orders, and how violations will be enforced. In this paper we summarize the introduction of state policies in those states which issued statewide mandates, and how these mandates are being enforced.

Methods

Our subjects were the 33 states which had mask mandates in effect by August 1.

We used newspaper and broadcasting articles as our primary sources. We identified these articles using Google searches ending August 4 with the following keywords: “COVID-19”, “State” (e.g., “Pennsylvania”) AND “mask order” or “mask mandate” AND “enforcement” OR “education”. We used newspaper or broadcast articles as the primary source because they contained essential information about the mandates, as well as additional information about enforcement. We identify primary sources for each state in the *Underlying data*, Appendix 1¹. Most news sources came from local broadcast stations, local and national news services, networks including the Public Broadcasting System, CBS, and ABC. We used the actual ordinances as secondary sources, but these often did not contain information about enforcement.

We abstracted the following items for each state:

Are businesses given first-line responsibility for their customers and employees? By reading news articles, we determined if businesses were directly responsible for mask wearing behaviors of customers and employees on their premises. Answers were “Yes,” “No,” or in a few cases, “Unsure.”

What authorities enforce whether businesses apply mask wearing orders on their premises? We determined from the news articles which government agencies were responsible for ensuring that businesses were applying the governors’ orders. This information might also be obtained from the governors’ orders. For each state, we listed these authorities: “LLE” indicates “Local Law enforcement,” “LPH” signifies “Local Public Health,” and “DOH” signifies “Department of Health.”

What authorities enforce mask wearing behaviors outside of business premises? We identified the enforcement authorities from the news articles. Abbreviations are the same as the previous question.

Is education viewed as a primary tool to encourage mask wearing behaviors? We obtained this information from news articles. Answers were “Yes” or “No”.

Do local governments (counties and municipalities) pass their own orders? We obtained this information by searching news articles which identified additional county or municipal mask orders within individual states. Answers were “Yes” or “No”.

Has local law enforcement shown any resistance to enforcing statewide orders? We obtained this information by searching for news articles that identified local law enforcers’ comments on “enforcement.” Answers were “Yes” or “No”.

Results

The publications on which the analysis was based are shown in the *Underlying data*, Appendix 1¹. These data underlying the analysis are shown in the Data Availability section.

Which states issued statewide mandates?

We identify the 33 states with statewide mandates (green) in [Figure 1](#). We did not cover states with county or municipal orders (yellow), states with only municipal orders (brown) or states with no orders (red).

Who was required to wear masks?

The entire population, with exceptions, was included in the order. Persons exempted from the orders were persons with disabilities or medical conditions who were over specific ages. The age above which masks were mandatory were 2 (14 states), 4 (3 states), 5 (3 states), 6 (1 state), 7 (2 states), 9 (4 states), 10 (4 states), 11 (1 state) and 12 (1 state). See [Table 1](#).

When did the mandate become effective?

Mandates became effective in the months of April (8 states), May (7 states), June (4 states), July (12 states) and August (2 states). See [Figure 1](#).

What was the scope of the mandate (indoor, indoor and outdoor, or “in public”)?

The mandates covered indoor only (8 states: Colorado, Hawaii, Indiana, Maine, Montana, Minnesota, Montana, Oregon, and West Virginia), outdoor and indoor or “public” places usually where recommended spacing was not available or there were large crowds (25 states). Some states excluded certain industries (e.g., gyms) if they did not meet public health requirements. See [Table 2](#) for individual state information.

Who was the primary target of the violation: businesses or individual non-mask wearing violators?

In 26 states, businesses and establishments formed the primary targeted group. Three states (Arkansas, Indiana, New Jersey) targeted only individual mask non-wearers. In two states (Pennsylvania, Wisconsin) we were unsure of the targeted group. See [Table 2](#).

Statewide Mask Laws in the US by Date of Implementation

Figure 1. In effect dates of statewide orders by US state. The first state order (New Jersey) came in effect on April 8, 2020. We followed trends until 1 August, 2020. State acronyms are as follows. Alabama (AL), Alaska (AK), Arizona (AZ), Arkansas (AR), California (CA), Colorado (CO), Connecticut (CT), Delaware (DE), Florida (FL), Georgia (GA), Hawaii (HI), Idaho (ID), Illinois (IL), Indiana (IN), Iowa (IA), Kansas (KS), Kentucky (KY), Louisiana (LA), Maine (ME), Maryland (MD), Massachusetts (MA), Michigan (MI), Minnesota (MN), Mississippi (MS), Missouri (MO), Montana (MT), Nebraska (NE), Nevada (NV), New Hampshire (NH), New Jersey (NJ), New Mexico (NM), New York (NY), North Carolina (NC), North Dakota (ND), Ohio (OH), Oklahoma (OK), Oregon (OR), Pennsylvania (PA), Rhode Island (RI), South Carolina (SC), South Dakota (SD), Tennessee (TN), Texas (TX), Utah (UT), Vermont (VT), Virginia (VA), Washington (WA), West Virginia (WV), Wisconsin (WI), Wyoming (WY).

What is the maximum penalty of a violation?

Ten states had provisions for fines only. The usual amount was between \$100 and \$200, but NY had a maximum of \$1,000. Nine states had provisions for fines and/or jail sentences. The maximum fine in this group was \$5,000 (Hawaii, Maryland) and the maximum jail sentence was one year (Maryland), but these amounts were outliers. More typical values were \$500 fines and/or 30 days to six months in jail. In five states fines varied by county. The other states did not specify penalties, and some of these could have no penalty: in a number of states sheriffs expressed a strong preference for education over criminal or even civil proceedings. See [Table 2](#) for individual state information.

Who is the enforcement agency?

In most of the states (27 states) the government relied on private businesses to enforce mask wearing behaviors. Three

states (Arkansas, Indiana, New Jersey) focused directly on non-mask-wearers. We were unsure of the governors' focuses in three other states (Massachusetts, Pennsylvania, Wisconsin). In addition, because many states extended the mandate to outdoor non-business settings, there was enforcement in these settings as well. The pattern of enforcement in the two settings was very different.

Agencies which enforced businesses include state occupation safety and health agencies (Nevada, Ohio, Oregon, Washington, Kentucky); state or local public health agencies (Connecticut, Delaware, Indiana, Kentucky, Montana, New Mexico, New York, Ohio, Virginia, Wisconsin), city or county law enforcement (Connecticut, Hawaii, Kansas, North Carolina), alcohol and beverage control (California, Colorado), business regulators and licensers (Maine, Mississippi, Rhode Island). In some cases regulators were not specified, or the area was not enforced by

Table 1. Data for US states with statewide mask orders. Includes date the order was in effect, fines and sentences, and maximum age for exemption.

State	Date of Mask Order	Penalty	Exceptions (Age)
Alabama	16-Jul-20	\$500 fine and/or jail	Aged 6 or younger
Arkansas	20-Jul-20	\$100-500 fine	Aged 10 or younger
California	18-Jun-20	Misdemeanor + fine	Aged 2 or younger
Colorado	17-Jul-20	"Civil or criminal penalties"	Aged 10 or younger
Connecticut	20-Apr-20		Aged 2 or younger
Delaware	28-Apr-20	Fine up to \$500, jail up to 6 months	Aged 12 or younger
Hawaii	20-Apr-20	Fine up to \$5000, jail up to 1 year	Aged 4 or younger
Illinois	01-May-20	Varies by locality	Aged 2 or younger
Indiana	27-Jul-20	Planned penalties removed	Aged 7 or younger
Kansas	03-Jul-20	Varies by locality	Aged 5 or younger
Kentucky	11-May-20	Fine (starting July 10)	Aged 4 or younger
Louisiana	13-Jul-20	Varies by locality	Aged 7 or younger
Maine	01-May-20	Varies by locality	Aged 2 or younger
Maryland	18-Apr-20	Fine up to \$5000, jail up to 1 year	Aged 2 or younger
Massachusetts	06-May-20	Fine up to \$300	Aged 2 or younger
Michigan	27-Apr-20	Fine up to \$500 (starting July 13)	Aged 2 or younger
Minnesota	25-Jul-20	Fine up to \$100	Aged 5 or younger
Montana	15-Jul-20	Trespassing charge	Aged 4 or younger
Nevada	24-Jun-20		Aged 10 or younger
New Jersey	08-Apr-20	Fine up to \$1000, jail up to 6 months (starting July 8)	Aged 2 or younger
New Mexico	15-May-20	Fine up to \$100 (starting July 1)	Aged 2 or younger
New York	17-Apr-20	Fine up to \$1000 (Starting July 9)	Aged 2 or younger
North Carolina	26-Jun-20	Trespassing charge	Aged 10 or younger
Ohio	23-Jul-20	Fine up to \$750, jail up to 30 days	Aged 9 or younger
Oregon	01-Jul-20	Fine up to \$1250, jail up to 30 days (starting July 13)	Aged 11 or younger
Pennsylvania	19-Apr-20		Aged 2 or younger
Rhode Island	08-May-20	Varies by locality	Aged 2 or younger
Texas	03-Jul-20	Fine up to \$250 (repeat offenders)	Aged 9 or younger
Vermont	01-Aug-20		Aged under 2
Virginia	29-May-20	Fine up to \$2500, jail up to 1 year	Aged 9 or younger
Washington	26-Jun-20	Fine up to \$1000, jail up to 90 days	Aged 2 or younger
West Virginia	06-Jul-20		Aged 9 or younger
Wisconsin	01-Aug-20	Fine up to \$200	Aged 5 or younger

Table 2. Enforcement of statewide mask orders. Enforcement includes business responsibility, the state authority that enforces both inside and outdoor subjects, whether states emphasize education regarding mask wearing, whether local governments also impose mask orders, and if local law enforcement resisted a role in enforcing the order. L=local, LE = law enforcement, PH=public health, OSH=occupational safety and health, DOH=department of health.

State	Business responsible for customers / employers?	Authority that enforces businesses	Authority that enforces outdoor mask wearers	Education a primary prevention tool?	Local governments may also pass own orders	Resistance from Local Law Enforcement
Alabama	Yes	No	LLE	Yes	No	Yes
Arkansas	No	None	LLE	Yes	Yes	Yes
California	Yes	Alc.Bev. Control	LLE	Yes	Yes	Yes
Colorado	Yes	Agencies like state liq. Control board	PH, LLE	Yes	Yes	Yes
Connecticut	Yes	PH & LLE	LLE	Yes	No	No
Delaware	Yes	PH	PH	Yes		No
Hawaii	Yes	LLE	LLE	No	Yes	Yes
Illinois	Yes	None	LLE	Yes	Yes	No
Indiana	No	State & local PH	State & L PH	Yes		No
Kansas	Yes	LLE	LLE	Yes	Yes	Yes
Kentucky	Yes	LPH & Labor Cabinet	LLE	No	No	Yes
Louisiana	Yes	state fire marshall	LLE	No	Yes	Yes
Maine	Yes	Business regulators			Yes	
Massachusetts	Unsure	Unsure	LLE	Yes		No
Michigan	Yes	state licensing body	LLE	No	No	Yes
Minnesota	Yes	LLF				Yes
Montana	Yes	LLE, LPH	LLE	Yes	No	Yes
Nevada	Yes	OSHA	Limited	Yes	No	Yes
New Jersey			LLE	Yes		Yes
New Mexico	Yes	State pol, DOH	Limited	Yes	No	Yes
New York	Yes	State/cty DOH	LLE	Yes	Yes	Yes
North Carolina	Yes	LLE	LLE	Yes	No	Yes
Ohio	Yes	LHD / OH Invest. Unit	Unclear	Yes	No	Yes
Oregon	Yes	OSH	LLE	Yes	No	Yes
Pennsylvania	Unsure	Not enforced	LLE	Yes	No	Yes
Rhode Island	Yes	RI Dept Bus Reg	LLE	Yes	No	Yes
Texas	Yes	Local govt	LLE	Yes	Yes	Yes
Vermont	Yes	Voluntary	None	Yes	No	No
Virginia	Yes	DOH, state licensing agencies	Focus on business	Yes	No	Yes
Washington	Yes	WA Dept of Labor & Industries	Unclear	Yes	No	Yes
West Virginia	Yes	Business self-enforcement	None	Yes	No	No
Wisconsin	Uncertain	PH	Local and state officials	Yes	No	Yes

the government. The enforcement of non-mask wearing behavior *outside of businesses* was usually assigned to local law enforcement (19 states) or public health (3 states). In other cases, there was limited to no enforcement outside the business setting. Many local sheriffs or local police chiefs stated their objections to enforcement on grounds that there were limited resources; a few also mentioned constitutional grounds.

Discussion/conclusions

Based on public and journalist reports, we analyzed the introduction and enforcement of statewide mask wearing mandates in the 33 US states that imposed such orders between April 10 and August 1, 2020. Most states relied on businesses to enforce customer and employee mask wearing behavior. However, both the contents of the governors' orders and the type and degree of enforcement varied widely between the states. Enforcement responsibility for personal (outdoor) mask wearing behavior was handed over to local law enforcement.

The business sector of the economy has been very active in COVID-19 prevention during this time period by introducing mask wearing regulations for its customers and employees. A survey of large US retail chains showed that 16 chains had introduced cross-country mask wearing policies in May, 2 in June, and 34 in July. Despite the adoption of storewide prevention policies, businesses, their trade associations, and employee trade unions have expressed concern at taking on primary enforcement roles. Private companies still relied on state laws to provide them with a rationale for requiring customers to wear masks. These businesses are subject to degrees of enforcement that have been inconsistent across states and that have often been

lax. Many governors' orders also covered outdoor areas, and most of these were nominally enforced by local law enforcement agencies. However, senior law enforcement officers in all states issued statements that they would not enforce mask wearing orders. For example, 38 sheriffs in Montana issued an op-ed which stated that a mask wearing directive "is not a mandate for law enforcement to issue citations and arrest violators." Although such statements were not universal, examples can be found in every state.

We used both governors' orders and news reports for our data sources. Policies like engaging in public education are subjectively described and data for them are not collected; instead we used sheriffs' interviews with journalists to document the policies. Also, we could not obtain data on citations written by local law enforcement. Nevertheless, information on education and enforcement was widely reported in the press across the nation, and strongly suggests a national trend. It also indicates that mask wearing behavior, now considered a bulwark against the spread of COVID-19, is not being strongly enforced, especially in the outdoor sectors.

Data availability

Harvard Dataverse: Press articles on statewide mask orders in 33 US states. <https://doi.org/10.7939/DVN/SFIT0R>¹

This project contains the following underlying data:

- **Appendix 1 Press Publications.** This file contains the news articles that we used to abstract the descriptive variables. It includes state, topic, and internet address.

References

1. Jacobs P: **Press articles on statewide mask orders in 33 US states.** UAL Dataverse, V1. 2020. <http://www.doi.org/10.7939/DVN/SFIT0R>

Open Peer Review

Current Peer Review Status:

Version 1

Reviewer Report 20 January 2021

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Charles Hunt

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This is a descriptive study of state-level mask mandates in the U.S. that were implemented between April 10, 2020, and August 1, 2020, to mitigate the spread of COVID-19. The objective of the study is to document which states had issued mask mandates, to characterize the mask mandates and to assess how the mandates were being enforced. The study also assessed whether law enforcement officials had demonstrated resistance to enforcing mask mandates.

The study methodology involved conducting online searches using Google for newspaper and broadcast articles as the primary data source. The actual text of the orders (described as "ordinances") was identified as a secondary data source. The documents were reviewed, and specific characteristics of interest were abstracted from the text.

The study found that policies varied substantially among the 33 states that had issued mask mandates, particularly with respect to enforcement and penalty provisions. State policies varied also by authority of local governments to issue mask mandates and exceptions (e.g., age, medical contraindications). While the degree to which law enforcement officials had demonstrated resistance to enforcement was not characterized in the study, the authors noted that examples of resistance could be found in every state.

The article clearly describes the methodology used to identify which states had mask mandates, including the specific online search terms and other parameters. While general descriptions of the abstract categories were provided (e.g., enforcement requirements for businesses, which authorities enforce business requirements, whether education is viewed as a primary tool, etc.), the article did not include detailed definitions for each category. The article also did not describe how the actual text of the orders was utilized in the abstraction process. These methodology details might provide additional clarity with respect to how the states were categorized. For example, Kansas is categorized as having a statewide mask law. While that is correct, the law also

allows local boards of county commissioners to adopt orders that are less stringent than the state order, thereby giving counties the option to opt out, which many have done^{1,2}. The article provides a link to the source data in the form of a Microsoft Word document with URLs for each article or order by state.

Reproducibility of the study is uncertain given the qualitative nature of the methods, the lack of coding method details and reliance on news articles as the primary data source. In addition, while URLs are provided for each source document, full citation details are not provided. As a result, links might be obsolete, or the content might have changed. In our own government mitigation policy research, we have found it challenging to interpret and consistently categorize aspects of public health orders and other official governmental mitigation policy actions. In addition, we have often found discrepancies between published news reports and the actual text of the orders. Nonetheless, the article is clearly written and well-organized, the conclusions appear sound, and the study makes an important contribution to understanding the challenges of implementing and enforcing population-level policies to control the spread of COVID-19.

(1) Kansas Health Institute. A Kansas Twist—Reopening plans for Kansas counties. Available <https://www.khi.org/policy/article/20-25>¹

(2) Van Dyke ME, Rogers TM, Pevzner E, Satterwhite CL, Shah HB, Beckman WJ, Ahmed F, Hunt DC, Rule J. Trends in county-level COVID-19 incidence in counties with and without a mask mandate – Kansas, June 1 – August 23 23, 2020. *Morbidity and Mortality Weekly Report*, 2020, 69(47), 1777-1781.²

References

1. A Kansas Twist—Reopening plans for Kansas counties. *Kansas Health Institute*. [Reference Source](#)
2. Van Dyke ME, Rogers TM, Pevzner E, Satterwhite CL, et al.: Trends in county-level COVID-19 incidence in counties with and without a mask mandate. *Morbidity and Mortality Weekly Report*. 2020.

Is the work clearly and accurately presented and does it cite the current literature?

Yes

Is the study design appropriate and is the work technically sound?

Yes

Are sufficient details of methods and analysis provided to allow replication by others?

Partly

If applicable, is the statistical analysis and its interpretation appropriate?

Not applicable

Are all the source data underlying the results available to ensure full reproducibility?

Partly

Are the conclusions drawn adequately supported by the results?

Yes

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Epidemiology; public health systems; public health policy

We confirm that we have read this submission and believe that we have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.

Reviewer Report 10 December 2020

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Evelyn Forget

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This article documents policies and enforcement actions in the 33 states that adopted face mask policies between 10 April and 1 August 2020, by examining news articles and broadcasting articles retrieved through Google on August 4. They found that states used a variety of state and local agencies to enforce policies, and that these agencies overwhelmingly focused on education rather than legal penalties.

The article is descriptive in nature. The methods are straightforward and clearly articulated, including search terms, databases and dates of access. The methodology is appropriate. The author has made the data retrieved available and therefore it is possible to replicate the study, reproduce it in the future to determine whether enforcement agencies or policies have changed over time as case positivity rates, vaccination availability and/or mortality change, and to augment the study by using additional search terms on the original or alternative databases. The article is clearly written, and the conclusions supported by the evidence.

Is the work clearly and accurately presented and does it cite the current literature?

Yes

Is the study design appropriate and is the work technically sound?

Yes

Are sufficient details of methods and analysis provided to allow replication by others?

Yes

If applicable, is the statistical analysis and its interpretation appropriate?

Not applicable

Are all the source data underlying the results available to ensure full reproducibility?

Yes

Are the conclusions drawn adequately supported by the results?

Yes

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Health economics; health policy

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.

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