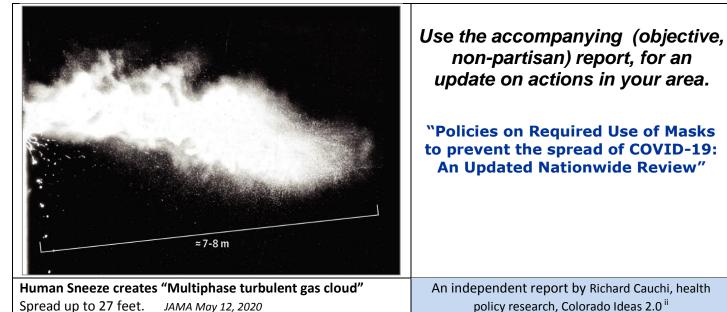
# **Required Face Masks = Saving Lives**

- > One shout: "hello."
- > One sneeze.
- One close encounter on a sidewalk.

**Education & Advocacy Edition** January 2021

# Three weeks later, could this become one more death or life-threatening hospitalization?

- 1. Required Masks will save lives. Virtually all scientific, medical, and public safety information points to the use of masks or cloth face coverings as one of four standard tools to avoid infection and potentially save lives. While this has become a very widespread "recommendation" in all 50 states, many jurisdictions, including the U.S. government and about 20 states do not require such use statewide for the public.
- 2. -NEW- President Biden's administration moved on day one (Jan. 20, 2021) to implement coast-to-coast mask programs, but state-based leadership and enforcement is still needed.
- 3. Evidence-Based Medical Science has been de-emphasized. A growing number of internationally recognized scientists and medical experts show that masks make a dramatic difference in avoiding further spread of infection of the COVID-19 virus. Learn about the latest medical science data.
- 4. Mandatory masks are in effect in many states, cities and counties. The attached report focuses on the locations and jurisdictions that have adopted **required use**, for broad or narrow situations.



Spread up to 27 feet. JAMA May 12, 2020

#### Policies on Required Use of Masks to prevent the spread of COVID-19: An Updated Nationwide Review <sup>1</sup>

#### Date: January 21, 2021



By Richard Cauchi, health policy research, Colorado Ideas 2.0<sup>2</sup>

**OVERVIEW:** The use of cloth face coverings or face masks has been one of the central issues, and tools, in the global fight to prevent the spread of COVID-19. Since late March of 2020, this has become a simple, low cost or no-cost action that virtually any individual can take.



Colorado Governor Polis announces face covering policies

As updated in November, the CDC now officially <u>recommends use</u> of such masks, now reenforced and expanded by the incoming Biden Administration (Jan. 21, 2021). As widely agreed, masks can prevent person-to-person COVID infections and literally save lives in any local or neighborhood setting, worldwide. The device can be a simple manufactured or doit-yourself one, using age-old, low-tech cloth material (including multilayer cloth or if necessary, a temporary cotton bandana or scarf.) With commercially sewn or home-made face coverings now encouraged worldwide (often free or costing a few dollars), billions of people globally can protect themselves. <sup>1</sup>

> Read more about the science, scarcity and economics of face coverings, p. 10 and sources, p. 11-12.

-*NEW*- **THE BIDEN FEDERAL INITIATIVE.** Beginning Inauguration Day, January 20, 2021, President Biden has issued both binding requirements and expanded guidelines affecting broad use of face masks. The report states:

*"Implement masking nationwide by working with governors, mayors, and the American people.* The President has asked the American people to do what they do best: step up in a time of crisis and wear masks. He has issued an *Executive Order Protecting the Federal Workforce and Requiring Mask-wearing* which directs compliance with CDC guidance on masking and physical distancing;

- in federal buildings, on federal lands, and by federal employees and contractors.
- Additionally, the President will issue Executive Order Promoting COVID-19 Safety in Domestic and International Travel which directs applicable agencies take immediate action to require mask-wearing on <u>many airplanes, trains</u>, and certain <u>other forms of public transportation</u> in the United States.
- Develop options for expanding public health measures for domestic travel and cross-border land and sea travel;
- He has called on governors, public health officials, mayors, business leaders, and others to implement masking, physical distancing, and other CDC public measures to control COVID-19."
   (Excerpt from "National Strategy for the COVID-19 Response and Pandemic Preparedness," posted by The White House, 1/21/2021)<sup>3</sup>

**STATES AND LOCALS FIRST IN THE LEAD:** In the U.S., as of mid-January 2021 there are now at least <u>45 states and</u>



<u>territories</u>, as well as local and regional jurisdictions, that have acted on the medically indicated need to make mask/face covering use a <u>mandatory</u>, <u>legal requirement</u>, *not* just a recommendation. Evolved over a 10-month period, about <u>35 states</u>' orders are broadly aimed at protecting individuals in public settings and/or employees in public-use buildings. Others are focused or limited to certain specified employees or professions. One calculation shows that by August about <u>285 million or 85 percent of the nation's population</u> were in states and/or local areas with such orders. <sup>v</sup> Of these, 251 million (or 75 percent) were covered by statewide orders.<sup>4</sup> Another 34 million were counties and cities with mainly local mandatory orders. Exemptions by age and health, plus uncounted travelers, make actual totals vary.

This differences became more distinct and urgent with the phased reopening of businesses and federal, state and local orders allowing indoor dining and group gatherings. For these next phases, the broader, near-universal use of masks in "appropriate settings" is seen as a low-cost tool that supports community interaction and freedom of movement. Compared to lockdowns and "stay-at-home" orders, required masks, combined with required 6-foot social distancing and handwashing became the three tools that allow businesses and recreation to reopen more safely. More recently, some states have added enforcement and even fines for non-compliance.<sup>5</sup>

This report is a review of latest available data on states and other jurisdictions that have moved to increase the use of masks and cloth face coverings, especially describing those with mandatory or required uses. The lists below include links to sources and citations, but the document itself is not intended as legal or medical advice. Some mandatory use plans have pending expiration dates or may be rescinded due to opposition. Because all policies are subject to change, sometimes on short notice, readers should note listed dates and also rely on source web links to identify future updates.

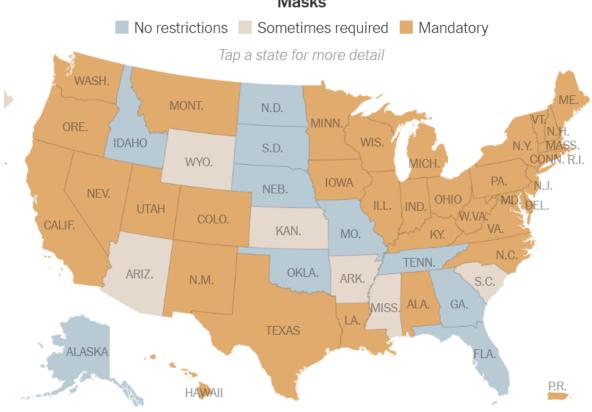
# STATES: Mandated Masks / Cloth Face Coverings in Public

RECENT CHANGES & NEWS: Federal Executive Order (Jan. 21, 2021) In Iowa (Nov. 17), North Dakota (Nov. 13), Utah (Nov. 14), and West Virginia (Nov. 17) governors each imposed a broad required use of masks order for the first time or expanded earlier limited requirements. North Dakota (Jan. 18) requirements expired.

> "Masks do work:" latest medical science data and sources. > "Masks Work, an interactive graphic (Oct 31, NY Times) > Special mask requirements only for schools are not tallied in this report.

# Map of Required Use of Masks-

Adopted from NGA and New York Times graphics (Link and Update: Jan. 21, 2021) Update: North Dakota mandatory order expired January 18, 2021



# Masks

This table integrates author research, National Governors Association (NGA)<sup>6</sup>, ASTHO <sup>10</sup>, Masks4All <sup>7</sup>, AARP, AMA, and a university-based collaboration that measures 30 policy or legal actions by states. \*Excerpts accessed regularly 4/28 - 1/8/2021. This report only covers face masks and cloth coverings. <sup>8</sup> For legal text, links and details, see pp. 3-9. The category "essential businesses" now also includes individuals or employees in public-facing businesses, with exceptions for safety and medical conditions. <sup>9</sup>,

Key: Dark shadin	<mark>g</mark> = broader a	oplication   Light shading =	limited application (a visual	guide only; <u>see notes</u> )
State	State of emergency	Mandate face mask use by some/all individuals in public spaces	Mandate face mask use by employees in public- facing businesses	Face mask statewide "recommended" (NGA data)
Alabama .	3/13/2020	(also cities) 7/16/2020	* (also cities) 5/11/2020	Yes, besides mandate
Alaska .	3/11/2020	(order lifted; now recommended) 5/22/2020	(order lifted; now recommended) 5/22/2020	Yes
Arizona .	3/11/2020	(state order lifted; now cities/counties) 5/2020	(state order lifted; now cities/counties) Partial 5/7/2020	Yes
Arkansas .	3/11/2020	7/20/2020	5/11/2020	Yes, besides mandate
California .	3/4/2020	<u>*</u> (+ major cities & counties) 6/18/2020	<u>*</u> (+ major cities & counties) . 5/2020; 6/18/2020	Yes, besides mandate
Colorado .	3/11/2020	<u>*</u> (+ major cities & counties) 7/17/2020	7/17/2020	Yes, besides mandate
Connecticut .	3/10/2020	4/20/2020	4/3/2020	Yes, besides mandate
Delaware .	3/13/2020	4/28/2020	5/1/2020	Yes, besides mandate
Dist. of Columbia	3/11/2020	(certain businesses) 4/15/2020	(certain businesses) 4/15/2020	Yes, besides mandate
Florida	3/9/2020	* (cities & counties) 0	<pre>* (+ cities &amp; counties)     (certain businesses) 5/2020</pre>	yes
Georgia	3/14/2020	* (cities & counties) 0	(certain businesses) 4/23/2020	yes
Hawaii	3/4/2020	(certain businesses) 4/16/2020	(certain businesses) 4/16/2020	Yes, besides mandate
Idaho	3/13/2020	<u>*</u> (major cities & counties) 0	* major cities & counties) 0	yes
Illinois	3/9/2020	5/1/2020	5/1/2020	Yes, besides mandate
Indiana	3/6/2020	(certain businesses) 7/27/2020	(certain businesses) 5/4/2020	yes
lowa - <i>new</i> -	3/17/2020	11/17/2020	11/17/2020	yes
Kansas	3/12/2020	<u>*</u> 7/3/2020	6/29/2020	Yes, besides mandate
Kentucky .	3/6/2020	7/10/2020	(businesses must provide) 7/10/2020	Yes, besides mandate
Louisiana	3/11/2020	7/13/2020	5/1/2020	Yes, besides mandate
Maine	3/15/2020	5/1/2020	5/1/2020	Yes, besides mandate
Maryland	3/5/2020	4/18/2020	4/18/2020	Yes, besides mandate
Massachusetts .	3/10/2020	5/6/2020	5/6/2020	Yes, besides mandate
Michigan .	3/10/2020	4/26/2020	4/26/2020	Yes, besides mandate
Minnesota	3/13/2020	7/25/2020	(order lifted;; then restored 7/25/2020	yes
Mississippi	3/14/2020	(certain businesses& counties) 8/6/2020; 5/8/2020	(certain businesses & counties) 5/7/2020	Yes, besides mandate
Missouri	3/13/2020	0	0	yes
Montana	3/12/2020	(certain counties& city) 7/15/2020	(certain counties) 7/15/2020	yes
Nebraska	3/13/2020	(certain businesses) <u>* 5/4/2020</u>	(certain businesses) <u>*</u> 5/4/2020	Yes, besides mandate
Nevada	3/12/2020	6/26/2020	(most businesses) * 5/4/2020	Yes, besides mandate
New Hampshire	3/13/2020	**(all health facilities)	(certain businesses) 5/1/2020	Yes, besides mandate
New Jersey	3/9/2020	(certain businesses) 4/8/2020	4/8/2020	Yes, besides mandate
New Mexico	3/11/2020	5/4/2020	(certain businesses) 5/2020	yes

New York	3/7/2020	4/17/2020	4/17/2020	Yes, besides mandate
North Carolina	3/10/2020	<u>*</u> (+ cities & counties) 6/26/20200	* (cities & counties) 6/26/2020	Yes, besides mandate
North Dakota .	3/13/2020	(order lifted) 1/18/2021	(order lifted & reimposed & lifted 11/13/2020	Yes
Ohio	3/9/2020	(certain counties) 7/17/2020	(certain businesses & counties) 4/29/2020	Yes, besides mandate
Oklahoma	3/15/2020	* (state property & city only) 0	<u>*</u> (city only) 0	yes
Oregon	3/8/2020	(certain counties) 7/1/2020	(certain counties & businesses) 5/7/2020; 6/22/2020	yes
Pennsylvania	3/6/2020	(order lifted & reimposed) 7/1/2020	4/19/2020	Yes, besides mandate
Rhode Island	3/9/2020	4/18/2020	4/18/2020	Yes, besides mandate
South Carolina	3/13/2020	<u>*</u> (cities & counties) 0	<u>*</u> (cities & counties) 0	yes
South Dakota	3/13/2020	0	0	yes
Tennessee	3/12/2020	(certain businesses) 4/29/2020	(certain businesses) 4/29/2020	yes
Texas.	3/19/2020	<u>*</u> (cities & counties) 7/3/2020	<u>*</u> (cities & counties) 7/3/2020	Yes, besides mandate
Utah .	3/6/2020	11/14/2020	(order lifted & reimposed) 6/26/2020	Yes, besides mandate
Vermont	3/13/2020	(certain businesses) 4/17/2020	(certain businesses) 4/17/2020	Yes, besides mandate
Virginia .	3/12/2020	(certain businesses) 5/29/2020	(certain businesses) 5/29/2020	yes
Washington	2/29/2020	(certain businesses) (+cities & counties) 6/2020	(certain businesses) (+cities & counties) 5/4/2020	yes
West Virginia	3/16/2020	(order lifted, then reimposed) 11/14/2020	(order lifted; then reimposed) 5/4/2020	Yes, besides mandate
Wisconsin	3/12/2020	8/1/2020	6/1/2020	Yes, besides mandate
Wyoming	3/13/2020	(certain businesses) 5/1/2020	(certain businesses) 5/1/2020	Yes, besides mandate
Total for policy	51	36* statewide (+ local)	* 45 statewide (+ local)	51

Updates added 1/18/2021



(Credit: CBS)

#### Required Masks & Face Coverings - Examples in Detail <sup>10, 11</sup>

Date notations, such as (Nov. 2020) and -*updated*- indicate policies implemented for next phases related to reopening public space and facilities.<sup>12</sup> Use links or local sources to determine exact or proposed end dates, which may be extended or canceled. Also see list of related actions summarized by The Washington Post<sup>13</sup> and New York Times.<sup>14</sup> Summary descriptions are for general information, and are not intended as medical, travel or legal advice. Special requirements for schools are <u>not</u> tallied in this report.

State/Local <sup>15</sup>	<b>General descriptions</b> ( <i>Italics</i> indicates actual text excerpts as approved)
Alabama	Gov. Kay Ivey issued an order, July 15, extended to Jan 22: requires people statewide to wear masks
(also city/county)	in public settings (indoor space, transportation service vehicles, outdoor public space where 10 or
-updated Jan. 2021-	more people are gathered).

		• City of <b>Birmingham</b> and <b>Jefferson Co. (June 29)</b> : <u>require</u> all individuals over two to use a face
		covering or mask in public places. (April 28, 2020)
Ala	iska	All mandatory rescinded; <u>changed</u> to " <u>recommende</u> d" in <u>Reopen plan</u> (May 22, 2020)
		" <u>Reopen Alaska Responsibly</u> " 4/24/2020; Mandatory for visitors and employees in retail, restaurants,
		businesses and personal services. (May 7, 2020; phase 4)
Ari	zona	Exec. Order eliminates mandatory language; bans local orders that contradict (May 12)
-up	dated Nov	Masks required only for employees of barbers/cosmetologists and all at gyms.
		Update: Gov. Ducey <u>announced local governments</u> could put in effect required face-covering rules –
		as requested by Casa Grande, Chandler, Flagstaff, Gilbert, Glendale, Mesa, Phoenix/Maricopa
		County (June 20-), San Luis, Tempe, Tolleson, and Tucson, (June 17-)
Δrk	ansas	Statewide mandatory order 20-53 by Gov. Hutchinson (effective July 20; Extended to Feb. 27, 2021)
	dated Jan. 2021-	Cities and towns <u>authorized</u> by <u>Order 20-41</u> to establish mandatory mask orders. (announced July 3)
		Previously, selective mandatory: "must implement precautions" for essential business employees and
		patrons while on premises; gyms & fitness; personal services; theaters, gatherings "shall wear a face
		covering"; congregants in places of worship; (May 2020) Restaurants reopening for dine-in. (May 11)
	ifornia	Mandatory for public, per Gov. Newsom <u>statewide order</u> (June 18, ongoing). Excerpt: "People in
-	so Major cities	California must wear face coverings when they are in the high-risk situations listed below: • Inside of, or in line
	l counties)	to enter, any indoor public space; 1 • Obtaining services from the healthcare sector in settings including, a
-upo	dated Jan. 2021-	hospital, pharmacy, medical clinic, laboratory, physician or dental office, veterinary clinic, or blood bank; 2 •
		Waiting for or riding on public transportation or paratransit or while in a taxi, private car service, or ride-
		sharing vehicle; • Engaged in work, whether at the workplace or performing work off-site, when: •Interacting
		<i>in-person with any member of the public;"</i> April order covered only essential business employees .
		At least 20 counties and cities: Los Angeles effective April 10, residents must wear a mask, bandana
		or other type of covering over their noses and mouths when in grocery stores and other essential
		businesses. Workers at most essential and other businesses must wear face coverings, which
		business owners must either provide or reimburse workers for buying. <u>Additional communities</u> :
		include counties of <u>Alameda</u> , <u>Contra Costa</u> , <u>Marin</u> , Riverside (\$1,000 fine), San Bernardino (\$1,000
		fine), <u>San Mateo</u> , <u>Santa Cruz</u> , Sonoma and Yolo; also <i>cities</i> of Buena Park, Burbank, Costa Mesa,
		Fremont, Inglewood, Irvine, Long Beach, Pasadena, Pleasant Hill and San Francisco.
**(	Colorado	<ul> <li>Gov. Polis issued a mandatory statewide order <u>D 2020-138</u> and D <u>2020-190</u> (effective July 17;</li> </ul>
-upo	dated Jan. 2021-	extended to Feb 6, 2021) "face coverings are required in <u>public indoor spaces</u> unless the individual is
		10 years of age or younger, cannot medically tolerate a face covering" Also required "while using or
		waiting to use any" public/regulated transportation. Violations "may be subject to civil or criminal
		penalties", including trespassing.
		• For additional categories, <u>Download full guidance</u> (47 pp, Jan. 2021).
	For local health	jurisdictions & activities: see Colorado Association of Local Public Health Officials (CALPHO); Note that earlier
С		suspended if duplicative or contradictory with the updated state order. See Local orders and variances:
0	Aspen	Public health order requires face coverings inside businesses and outdoors, for ages 2 and above. Effective April
L O	-updated-	29-extended Nov. 4 (AP news article)
R	Adams &	New required mask order by county officials (adopted July 8- for 90 days). Douglas County withdrew (Post
A	Arapahoe Co's	news for 7/9/2020))   Mask compliance survey (51% to 95%, reported 8/16/2020)
D	Boulder	(Boulder County order: May 9; extended indefinitely "requiring face coverings for every person older than 12
0	County & cities	years old whenever in public anywhere in Boulder County that social distancing of six feet cannot be
	•	maintained." Boulder City Council voted on <u>emergency order 2020-15</u> , requiring face coverings for customers
		and employees inside businesses; and extending "stay-at-home" provisions through May 8.
		Louisville <u>mask order</u> . (May 7-June 5); Lafayette; Erie (reviewed Oct. 6)
	Denver	Public health orders require "all individuals three (3) years of age or older must wear a face covering over their
	-updated Jan.	nose and mouth when entering, inside, or moving within any Public Indoor Space" and while inside of, or
	2021	waiting in line to enter, businesses, facilities or retail stores, bus stops or health care facilities. Violations
		"may also be subject to a civil penalty of up to \$999."
	Durango	Mandatory order
	Edgewater	City Ordinance 2020-08 "Face Coverings are required within (all) businesses" open to the public that have signs
		that state masks are required., (Extended June 23-no expiration date.)

	Ft. Collins	(also Westminster, Northglenn, Englewood, and Fort Collins.) City public health order requires masks in "Any
		enclosed area, including retail and commercial businesses or on-site service providers, to which the public is
		invited or (with) workers, including volunteers." (June 1; Extended indefinitely) MSN news
	Glenwood	Glenwood Springs <u>Public health order</u> (No. 2 of 2020) requires face coverings for people "when entering and
С	Springs .	while inside of a place or conveyance open to the public and other public indoor or outdoor places" Extended
0	1.70 consider	June 5.
L O	I-70 corridor and area	Masks required in <b>Avon</b> ( <u>Order</u> ) <b>Basalt, Carbondale, Gunnison Co.</b> (April 2020 until vaccine is available);
R		Pitkin Co.( <u>Order</u> ), Winter Park ( <u>Order</u> )
Α	Jefferson Co.	<u>Jeffco Order 20-008 requires</u> mask when outside of a private residence, including indoor and outdoor spaces
D		(effective July 24; no expiration date)
0	Larimer Co.	County <u>order</u> : "Businesses can choose to require face coverings for customers, or to implement approved
		alternative controls" (May 16; no expiration date). Previous: <u>public health order</u> : "Business employees and clients (customers must wear face covers at all times when in the business." May 15):
	Lone Tree	<i>clients/customers must wear face covers at all times when in the business."</i> -May 15); Lone Tree's <u>mask order</u> . For people <i>"inside any indoor retail establishment"</i> (May 8-26, 2020)
	Routt County	Order requires all people entering businesses to wear face coverings. (April 10-)
	Summit Co.	Public health order "Individuals must wear face coverings that cover nose and mouth whenever in indoor areas
	Summe Co.	open to the general public or outdoors." (May 7-June 30, 2020, unless extended, rescinded or amended)
	Superior	Town of Superior requires all people to wear cloth face coverings whenever entering local businesses (May 4)
	Wheat Ridge	(Expired; see statewide order) City <u>Resolution #30,</u> anyone entering a business" <u>Effective April 27-May 30</u> ,
Co	nnecticut	Mandatory effective April 20, Extended through Feb. 14, 2021: Governor Ned Lamont's Executive
	dated Jan. 2021-	Order 7BB for state mask requirement applies to "any person in a public place in Connecticut who is
		unable to or does not maintain a safe social distance (6 ft.) <u>shall</u> cover their mouth and nose with a
		mask or cloth face-covering." Also applies to people who use public transportation, taxis or rideshare
		services. The state <u>released mask guidelines for essential workers</u> : Employees at essential businesses
		must wear masks or material that covers their mouth and nose at all times while at work. Employers
		must provide masks or the materials to make them. People who refuse to wear masks aren't
-		required to provide proof that they're medically exempt.
	laware	Mandatory: Order 13 by Gov. Carey, "Requiring Delawareans to wear face coverings in public
-up	dated Jan. 2021-	settings, including in grocery stores, convenience stores, pharmacies, doctor's offices, and on public
		transportation." (April 28, 2020; extended to Jan. 11, 2021)
	trict of	Mandatory Mayor's Order 2020-053: Closure of Non-Essential Businesses "When you leave your
	lumbia	home you <u>must</u> wear a mask."
	rida	Statewide recommendation only. Partial statewide mandate for employees in certain businesses.
•	cities and	( <u>Exec. Order 20-112</u> , <mark>May 4, 2020</mark> )
τοι	inties)	Miami-Dade County Executive Order 20-20 requires visitors and employees of grocery stores,
		restaurants, pharmacies and other essential businesses to wear masks, effective April 9. Other cities
		also require masks: Boca Raton, <u>Broward</u> , Cooper City, Fort Lauderdale, <u>Gadsden County,</u>
		Hollywood, Miramar, Delray Beach, Palm Beach. For Orlando/Orange county "every person working,
		living, visiting or doing business in Orange County," will be required to wear face coverings"
Ge	orgia	Local orders only in place for Atlanta, Clarke county and East Point.
		• Previously, <u>Limited EO</u> : Required for businesses that reopen. Restaurants and food service
		5/12/2020; <u>partly ended</u> 6/11/20, 7/15/20: "Require all workers to wear face coverings at all times"
		Gyms, fitness centers, bowling alleys, body art studios, estheticians, hair designers, and massage
		therapists must comply with sanitation requirements, including providing "personal protective
		equipment as available and appropriate."
	waii	Mandatory: All persons in the State shall wear a face covering over their nose and mouth when in
-up	dated Jan. 2021-	public. <mark>Extended through Feb.14, 2021</mark>
		Gov. David Ige's Executive Proclamation (17 <sup>th</sup> Supplemental), 11/23/2020 ; In effect as of: April 20
		"All customers shall wear a face covering as described and recommended in Section I.A., or as
		required by any applicable county order, while waiting to enter and while at an essential business or
		operation. All employees of essential businesses or operations who have any contact with customers
		or goods to be purchased shall wear the cloth face covering recommended by the CDC while at their
		<i>place of employment."</i> <u>Emergency proclamation</u> extends the stay-at-home order through May 31;
1		

	Kauai Mayor announced everyone over age 5 required to wear a mask outdoors.
Illinois	Mandatory order by Governor Pritzker: Individuals required to wear a face-covering or a mask when
	in public places where they are unable to maintain six-feet of social distancing. ( <u>news</u> ) (May 1, 2020)
	New law ( <u>S471</u> ) makes it a felony to assault a retail worker who is enforcing a mask-wearing policy.
	( <mark>effective Aug. 2020</mark> )
Indiana	"Back on Track IN" Gov. Holcomb announced a first-time mandatory mask order 20-48 for the public
-updated Jan. 2021	Inside a business, public building, or other indoor place open to the public (not including private
	offices where social distancing can be maintained); outdoor places where social distancing cannot be
	maintained; when using public transportation, taxi, private car service, or ride-sharing. (Effective July
	27 <mark>; extended through Jan. 24, 2021)</mark>
lowa	Gov. Kim Reynolds (R) for the first time, issued an Exec. order: all over age 2 must wear a mask
-updated Nov	"when inside a (public) indoor space." Effective Nov. 17-Dec. 10; may be extended).
Kansas	Gov. Laura Kelly (R) announced <u>order</u> 20-52; updated as <u>Order 20-68</u> on Nov 18, mandates " <i>most</i>
(+ city)	Kansans must wear masks in stores and shops, restaurants, and in any situation in which social
-updated Nov	distancing of 6 feet cannot be maintained, including outside." A state law passed in June allows
	counties to opt out of the mandate. More than 60 of Kansas' 105 counties have adopted the mask
	rule, up from 25 before Kelly announced the second order on Nov. 18.
	Previously only Kansas City required use (lifted May 2020)
Kentucky	Gov. Beshear signed a statewide order requiring residents and visitors to wear masks in most
	forward-facing businesses, like grocery and retail stores, and in outside public spaces when one can't
	stay 6 feet away. (Effective July 10-Aug. 9, 2020)
Louisiana	Gov. Edwards Proclamation 89-JBE-2020 "I am now mandating face coverings statewidein
	publicindoor or outdoor;" covers all 64 parishes, effective July 13-24, subject to extension. ( <u>news</u> ).
	Previously, mandatory Governor's order for essential business employees and patrons while on
	premises; "All employees of a business (May 1-15, 2020)
Maine	Mandatory: <u>Gov. Mills order</u> "requires Maine people to wear cloth face coverings in public places
	where physical distancing is difficult to maintain" (May 1-31, 2020)
Maryland	Gov. Larry Hogan's order requires that commuters and employees must wear face coverings while
	using Maryland public transit. Employees and customers over age 9 must wear face coverings inside
	essential businesses, though adults accompanying young children should make an effort to get them
	to wear a mask if they are in an essential business. In effect as of April 18- continues into July
Massachusetts	Mandatory: Governor Baker issued a <u>Safer at Home</u> order May 18 continuing required masks in
•	public spaces when six feet of physical distance cannot be maintained. <u>Order</u> requiring the use of
	masks or face coverings in public places. (May 1, 2020; ongoing). Earlier non-binding public health
	guidance <u>issued</u> April 10, 2020.
Michigan	On Oct. 2, Michigan's Supreme Court <u>overturned</u> parts of the Governor's binding orders ( <u>news</u> ),
-updated Oct	effective Oct 22. Gov. Gretchen Whitmer's <u>executive order No. 2020-59</u> , required face coverings
	<i>"when in any enclosed public space,"</i> effective April 27. Previously, Michigan reopened at reduced
	capacity under a <u>new executive order</u> the governor issued May 18. It allows bars and restaurants to operate at 50 percent capacity, with face coverings required for servers.
Minnesota	Gov. Tim Walz signed an Executive Order 20-81, July 22, effective July 25, requiring "a face covering
winnesota	in all public indoor spaces and businesses, unless alone. Additionally, workers are required to wear a
	face covering when working outdoors in situations where social distancing cannot be maintained."
	Previously: " <u>Stay Safe for Employers</u> : Mandatory use in certain businesses: Employees: " <i>Require the</i>
	use of source control face coverings" "Have customers and clients wear a face covering or mask,
	other than when outside" (June 15) (Gov. <u>Exec. Order 20-56</u> , May 13, 2020) – now recommended
	only. <u>Employees</u> who may have limited interaction with customers for purposes of curbside or
	outdoor pickup or delivery <u>must</u> wear a non-medical cloth mask. <sup>16</sup>
Mississippi	Gov. Reeves: Requirement in certain counties as outlined in the <u>state order 1527</u> ; Indoor spaces
-updated Jan. 2021	(business, school, public building) whenever social distancing cannot be maintained. (extended into
	Nov. 2020)
	, , , , , , , , , , , , , , , , , , ,

	August 4 <u>expanded order</u> : a face-covering mandate in all counties for public gatherings and retail
	settings for the next two weeks. Also, all adults and kids in schools must wear masks, unless there is a
	medical reason not to. (August 5; 2 weeks)
	Previously, certain counties (Hinds, DeSoto, Harrison, Rankin, Jackson, Washington, Sunflower,
	Grenada, Madison, Claiborne, Jefferson, Wayne, Quitman, Bolivar, Covington, Forrest, Humphreys,
	Panola, Sharkey, Simpson, Tallahatchie, Tate and Walthall counties) (added July 20, 2020) = 23.
	Exec. Order 1480 (May 8) Personal care and salons: employees and patrons "shall wear a face
	covering. " Gyms, also Restaurants and bars for dine-in service must provide & require use of cloth
	masks to <u>employees</u> who come into contact with customers. ( <u>news</u> , May 5, 2020)
Missouri	Local orders only in Jackson, Kansas City and St. Louis city/counties
Montana	Mandatory: Gov. Steve Bullock is issued a first-time statewide mask order. Applying in counties with
	four or more active cases. (announced July 15). Local order in <b>Big Horn</b> county
Nebraska	Mandatory for specified business employees and patrons while on premises. For personal
	care/salons: "The new <u>Directed Health Measures</u> will <u>require</u> both workers and patrons of these
	establishments to wear masks." (NGA, May 4, 2020). Local orders in Lincoln and Omaha.
Nevada	Mandatory: ( <u>Reopening Plan</u> June 2020) "All employers shall require employees who interact with the
-updated-	<i>public to wear face coverings, to the maximum extent practicable.</i> " Personal services: <i>"employees</i>
apaacea	<u>must</u> wear face coverings. Customers or clients <u>should wear</u> face coverings to the extent practicable."
New Hampshire	Gov. Chris Sununu of New Hampshire issued an order requiring masks at gatherings of more than 100
-updated Aug	people (Aug. 11, 2020) Previously, "Mandatory for employees and patrons in certain businesses"
-upuuteu Aug	
	while on premises. Mandatory for all health facilities ( <i>limited impact on the general population</i> )**
	( <u>NGA,</u> June <mark>, 2020</mark> )
New Jersey	Governor Philip Murphy now requires face coverings outdoors when social distancing is not possible.
	(effective 7/8/2020). In April Executive Orders No. 122 and 125 Requires masks for essential business
	employees and customers while on premises and workers and customers in public transit. Businesses
	must supply workers with face coverings and gloves. (effective 4/13/2020, no expiration date stated)
	For "essential retail business Require workers and customers to wear cloth face coverings while on the
	premises, except where doing so would inhibit that individual's health or where the individual is under two
	years of age, and require workers to wear gloves when in contact with customers or goods.
	Businesses must provide, at their expense, such face coverings and gloves for their employees.
	" <u>NJ Transit</u> (subway and commuter rail) <u>must adopt policies</u> <u>Require workers and customers</u> to wear cloth
	face coverings while on trains, buses and light rail vehicles except where doing so would inhibit that individual's health or where the individual is under two years of age, and require workers to wear aloves when in contact
	<i>health or where the individual is under two years of age, and require workers to wear gloves when in contact with customers"</i> Initial order in effect Apr. 7, described as the first state to take this action.
NI	
New Mexico .	Mandatory <u>gov. order</u> : Masks are required of everyone in public places, with exceptions for eating,
17	drinking, exercising & medical requirements; also for employees in certain businesses (May 13 2020)
New York <sup>17</sup>	Requires everyone in the state to wear a mask or a mouth/nose covering in public, with exceptions.
	Gov. Andrew Cuomo's <u>Executive Order 202.17</u> provides that "effective 4/17/2020, "any individual
	who is over age two and able to medically tolerate a face-covering <u>shall be required</u> to cover their
	nose and mouth with a mask or cloth face-covering when in a public place" when social distancing is
	not possible.
	The state has a pre-existing <u>law</u> banning masks and "unusual or unnatural attire or facial alteration"
	in public; it allows masks if police or officials grant permission to wear them. In this case, residents
	have permission to wear masks. (see CNN story 4/20/2020): New Yorkers must wear masks when
	unable to socially distance, Gov. Cuomo says
North Carolina	Mandate for public use: Executive Order 147, extends North Carolina's "Safer At Home Phase 2",
(+city mandates)	June 26-July 17, 2020. "Retail Businesses must have all customers wear Face Coverings when they
· ·	are inside the establishment and may be within 6 feet" <b>Cities</b> : <u>Raleigh</u> by emergency <u>order</u> (June 17)
	<i>requires</i> masks while in public places. <b>Durham</b> has required masks since April; <b>Orange County and</b>
Nouth Delasts	<b>Boone</b> also requiring masks since June.
North Dakota	Gov. Doug Burgum (R) ordered ( <u>#2020-23</u> ) masks indoors and outdoors when not socially distanced.
-updated Jan. 2021-	( <u>news release</u> ) Its <u>mandatory provision expired</u> on Jan. 18. Business restrictions limiting capacity also

	became recommendations rather than requirements (Nov. 13). Previously: <u>ND Smart Start</u> – Personal services employees.(May 2020)
Ohio	Mandatory order in certain high-risk counties (at least 8 counties, effective July 17-)
	<u>Director's Stay Safe Order</u> Mandatory "Businesses <u>must require</u> all employees to wear facial coverings" with medical or practical exceptions. Permissive: "Businesses <u>must allow</u> all customers,
	patrons, visitors to wear facial coverings" 4/29/2020. (May 2020) Local mask orders in counties
Oklahoma:	of Butler, Cuyahoga, Franklin, Hamilton, Huron, Montgomery, and Trumbull.
(+ cities)	Statewide Exec. Order for state property and buildings only. (extended to Feb 12, 2021) City orders in <b>Tulsa</b> (expanded Oct. 1-Dec. 31) and <b>Oklahoma City; earlier in Guthrie</b> (April 6-May 5:
-updated Jan. 2021-	<i>"all individuals <u>shall wear</u> a cloth face covering when making a public outing. (<u>news</u>); <b>Magnum</b> <u>city</u></i>
	order, April 7-May 15,
0	
Oregon	Gov. Kate Brown <u>order</u> effective July 1: " <i>Require employees, contractors, volunteers, customers and</i>
	visitors to wear a mask, face shield, or face covering" applies statewide unless varied.
	Previous order effective June 24 for Clackamas, Hood River, Lincoln, Marion, Multhomah, Polk and
	<b>Washington counties:</b> "A business is required to Require employees, contractors, volunteers,
	customers and visitors to wear a mask, face shield, or face covering, unless an accommodation or exemption is required."
	exemption is required"
	May <u>order</u> requires face masks for employees of grocery stores and pharmacies—as well as
Donneylyania	other businesses where 6 feet of distance between people may not be possible. (May 7, 2020)
Pennsylvania	Governor's mandatory <u>order from Department of Health.</u> As of: April 19, <u>e</u> ssential businesses must provide masks for their employees and require them to wear the masks; Customers at these
	businesses must wear masks while on the premises or be denied entry.
	"Measures for Businesses Permitted to Maintain In-person Operations (In effect as of: April 19, 2020)
	Sec A10:provide masks for <u>employees</u> to wear during their time at the business, and make it a
	<u>mandatory requirement to wear masks</u> while on the work site, except to the extent an employee is
	using break time to eat or drink, in accordance with the guidance from the Department of Health and
	the CDC <u>Sec. B6require all customers to wear masks</u> while on premises, and deny entry to
	individuals not wearing masks, unless the business is providing medication, medical supplies, or food"
Rhode Island	<u>Gov. Gina Raimondo's</u> Executive Order 20-24, (April 18, extended through Jan. 28, 2021 or as
	renewed. Sec.1 "All employees of Rhode Island's customer/client facing businesses and non-profit
	organizations, office-based businesses that are still in operation shall wear cloth face coverings
	unless an employee can easilymaintain at least six (6) feet of distance from other employees"
	Sec. 4 "All customer-facing business shall take steps to require customers to wear face coverings"
	Businesses must provide materials for employees to make those masks. Doesn't require that
	customers wear masks while inside essential businesses, but it encourages businesses to post their
	own mask requirements.
South Carolina	Executive Order: Required (only) in state government offices, buildings, and facilities.
	Seven counties, Columbia, Dorchester, Georgetown, Horry, Myrtle Beach, Orangetown, Richland
	have had local orders requiring masks.
Tennessee	Executive order has no requirement; but "provides local governments with authority concerning face
	coverings." (ongoing) Restaurant Guidelines: cloth coverings "worn by all employees, at all times,
	unless unsafe" (May 13) Local orders in Knox county, cities of Memphis and Nashville.
Texas	State Order GA-29 for required masks, applies in all counties that have 20 or more cases of COVID-
(Major cities &	19. Fines up to \$250 after warning, exempting ages 0-10. ( <u>news</u> ) (effective July 3; ongoing) Also,
counties)	Local governments "in major cities (Austin 4/13/20, Dallas County 4/18/20, Tarrant County/Fort Worth
-updated	4/18; order renewed 6/26 to 8/3/20, Harris County/Houston 4/27/20; renewed 6/24/20, Laredo 3/31/20, San Antonio
October-	<b>&amp; Bexar County</b> 4/16/20; restored by court order, 6/17) are requiring the use of face masks in public places"
	including when using public transportation or when inside public buildings. <i>Legal challenge:</i> The
	Texas AG warned Austin, Dallas and San Antonio over defying state orders Including requiring masks.
	(news: NY Times, May 13). Mask use at polling places upheld by federal court, 10/29/2020
Utah	Gov. Gary Herbert (R) issued a mask mandate Nov. 10 "until further notice." State Health guidance
	Terrest, informet (in individual individual for the antificial for the

-updated Nov	Report: Impact of Masks on Economic Activity (11/27/2020)
	Previously: Legislature extended Emergency Order ( <u>HJR-504</u> ) to August 20. <sup>xiii</sup>
	<u>Utah Leads Together IV.7</u> – June 26. Masks required in <u>state buildings</u> (effective July 17)
Vermont	Gov. EO-01-20 add. 12; Gov. E.O. 01-20, the "traveling and commuting public shall wear face
	coverings over their nose and mouth any time they are using public transportation" (July 2020)
	Previously: addendum 10: Mandatory for employees and patrons in certain businesses. "Employees
	must wear non-medical cloth face coverings (bandanna, scarf, or non-medical mask, etc.) when in
	the presence of others." (April 17-ongoing)
Virginia	Executive Order EO-72: Required use in Indoor public settings/Business patrons and employees.
	(Extended to <mark>Jan. 31, 2021</mark> )
Washington	
	State mandate <u>order</u> by Gov. Inslee: beginning <mark>June 26.</mark> Everyone in Washington must wear face
	coverings in public; includes both indoor and outdoor public spaces. Violations can be a
	misdemeanor. Seattle: "mandatory in certain retail establishments" (May 11, 2020)
West Virginia	Gov. Jim Justice (R) updated policy, "Face covering must be worn at all times in all public indoor
-updated Nov	<i>places</i> " <u>EO 77-20</u> effective Nov. 14, 2020
	Previously: " <u>required</u> to wear face coverings in public indoor spaces where social distancing can't be
	maintained,under age 9 exempt." <u>West Virginia Strong – The Comeback</u> "
Wisconsin	State mandate (summary): Gov. Tony Evers issued Emergency Order #1 requiring individuals to wear
-updated Jan. 2021-	face coverings when indoors and not in a private residence, with some exceptions. Effective August
	1, 2020; Extended through Jan. 19, 2021) See Executive Order #82 here.
	Wisconsin Supreme Court ruling striking down state "stay-at-home, does not affect requiring masks,
	which is <u>not contained</u> in the <u>governor's orders</u> . (news, <mark>May 13, 2020</mark> )
Wyoming	State mandate: Inside, or in line to enter, any business or government facility; obtaining services at
-updated Jan. 2021-	or visiting a healthcare setting; waiting or riding any public transportation.
	Health Order: Mandatory use by gym staff; patrons and staff at personal care operations. (May 2020)
	Territories
Guam	Executive Order 2020-09 Relative to Additional Isolation Measures. "All essential businesses and
	government agencies shall require that their employees and patrons shall wear face masks while on
	their premises.
Puerto Rico <sup>18</sup>	Mandatory. Provides for the mandatory use of medical masks for all employees at work; employers
	responsible for providing masks; imposes penalties for violations. As of May 26 all people are
	required to wear a mask when outside or inside a business. See <u>HB 2471</u> (NGA, May 2020)
Virgin Islands	Governor's Order Mandatory use: "All patrons are required to wear a face mask when entering a
	business. All gatherings of people require face masks (except children 2 and younger or those with

**No Masks to Pro-Masks:** The recommendation of wearing masks in the U.S. was a dramatic, direct reversal of medical policy. Until February and early March 2020, both the WHO and CDC promulgated public announcements and cautions stating that civilians should NOT wear masks in public, and that masks do not protect the wearer. Then, in late March, government health experts, first at CDC<sup>19</sup> and then WHO in April reversed that position and urged the use of masks by the general public.<sup>20</sup> The high-level, federal promotions of use of masks in the United States have been to "recommend" and "urge", rather than mandate or require such use. The federal CDC website includes <u>guidance and mask-making</u> <u>instructions</u>. A mid-April peer reviewed report<sup>21</sup> analyzes the evolving conclusions and recommendations. On May 6, CNN posted a consumer-friendly <u>story</u> on Why Some People Won't wear masks.<sup>22</sup> *CNN:* "In many ways the U.S. is uniquely vulnerable to COVID, with its large health disparities, high number of uninsured, decentralized response and widespread skepticism over public health guidance like mask wearing."

## CDC Director Dr. Robert Redfield strengthens mask use

...masks are "the most important, powerful public health tool we have" in fighting the pandemic. He said universal mask use could bring the pandemic under control in a few months and said, "I might even go so far as to say that this face mask is more guaranteed to protect me against Covid than when I take a Covid vaccine."

(Statement to the U.S. Senate committee hearing (CNN video, 9/15/2020)



# **CDC Recommendation Regarding the Use of Cloth Face Coverings**

#### Scientific Brief: Community Use of Cloth Masks Posted Nov. 10, 2020-

"The prevention benefit of masking is derived from the combination of source control and personal protection for the mask wearer..." Experimental and epidemiological data support community masking to reduce the spread of SARS-CoV-2. The prevention benefit of masking is derived from the combination of source control and personal protection for the mask wearer. The relationship between source control and personal protection is likely complementary and possibly synergistic, so that individual benefit increases with increasing community mask use.

**Who should NOT use cloth face coverings**: children under age 2, or anyone who has trouble breathing, is unconscious, incapacitated or otherwise unable to remove the mask without assistance. *Posted April 3, 2020; Reviewed May 22, 2020* 

#### WHO (World Health Organization)

https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/when-and-how-to-use-masks Wearing a medical mask is one of the prevention measures that can limit the spread of certain respiratory viral diseases, including COVID-19. (*Update June 8, 2020*)

#### **Global: Other Nations Act**

<u>Approximately 95% of the world lives in countries</u> where the government and leading disease experts both agree that masks are effective at reducing the spread of COVID-19.

**Mask Requirements Rescinded.** In response to opposition and protests, planned binding mask/face covering requirements were withdrawn, unenforced or deleted in some jurisdictions. Some examples:

- **Michigan's** Supreme Court on Oct. 2, struck down orders already in effect: *The governor did not have authority after April 30, 2020, to issue or renew any executive orders related to the Covid-19 pandemic,*" <u>the court wrote</u>. -*updated Oct.*-
- **Georgia's** governor "to mask mandates: I'll see you in court." <u>Legal battle</u> with Atlanta mayor Bottoms, July 2020.
- **Ohio:** Gov. DeWine said April 27 that face masks must be worn in stores but after some residents found the order "offensive," he dropped it, stating, "People were not going to accept the government telling them what to do."
- Oklahoma, city of Stillwater: A mandate for face coverings *"led to so much verbal abuse in its first three hours"* on May 1 that officials swiftly amended it, as reported by the NY Times. Masks became encouraged, not required. <u>post.</u>
- "Sheriffs rebel against new statewide mask requirements"- in <u>CA</u>, <u>NV</u>, <u>NC</u>, <u>OR</u>, <u>WA</u>. (Washington Post. 6/24/2020) <u>FL</u>: Marion Co (8/11/2020)
- Voting in a Pandemic Tests State Mask Orders. Polling place use upheld in TX; not required in KS and WI (<u>NY Times</u>, 10/29/2020.

#### > THE MEDICAL EVIDENCE- Published materials

- Broad Public Use of Masks-Evidence-based research-COVID-July 2020 (PDF) A companion summary and bibliography by Colorado Ideas 2.0
  - Supplement A1: CDC: Community Use of Cloth Masks to Control the Spread of CoV-2 Nov. 10, 2020 (PDF) -New
  - Supplement A: Masks May Reduce Viral Exposure Some Experts Say NY Times -July 28, 2020 (PDF)
  - o Supplement B: Yes, the Coronavirus Is in the Air-NY Times-July 30-2020 (PDF)
  - o Supplement C: Study Finds Evidence Virus Can Float in Air for Minutes or Longer. July 2020 (PDF)
  - o Supplement D: New Science Studies Confirm Value of Required Masks. August 2020 (PDF)
  - Supplement E: Six feet of distance: It's more complicated than that. August 2020 (PDF)

- <u>Supplement F:</u> Spate of New research supports wearing masks.- July-Sept., 2020 (<u>PDF</u>)
- o Supplement G: Masks do not restrict oxygen flow or cause CO2 Build-up. October 2, 2020 (PDF) -New in October-
- o "Masks Work, Really. We'll Show you How" an interactive graphic (Oct 31, NY Times) New
- Universal Masking in the United States (JAMA, Sept, 2020; posted Aug. 10) (PDF). Supplemental table by American Medical Association (AMA)
- Community Use of Face Masks and COVID-19: Evidence From A Natural Experiment Of State Mandates In The US. Health Affairs, August 2020. (Full text, <u>PDF</u>)
- "Seeing is Believing: Effectiveness of Masks," FL Atlantic Univ, June 30, 2020 (News release; Full Text PDF)
- "Face Masks for the General Public" <u>published</u> by The Royal Society (England), May 4, 2020. (<u>PDF-12 pp</u>); Summary by <u>The Guardian</u> – May 4, 2020
- "Face Coverings, Aerosol Dispersion and Mitigation of Virus Transmission Risk" Heriot-Watt Univ., UK, May 19, 2020 (24 pp. PDF)
  - "Face coverings can reduce COVID-19 transmission risk: study"; MedExpress, May 25, 2020. (link)
  - "Face Masks Against COVID-19: An Evidence Review" April 12, posted as PDF by preprints.org
- o "To mask or not to mask: Modeling the potential for face mask use by the general public" April 2020 link (16 pp)
- "Austria Has 90% Drop in Coronavirus Cases After Requiring People to Wear Face Masks"- <u>published</u> in Science Times, April 21, 2020.
- "Fast Action Saves Lives" published by <u>Daily Mail</u> April 21, 2020
  - Two of the first countries to make masks compulsory in Europe, now enjoy a small infection rate per capita.
  - -- *Czech Republic*: "63 Czechs per 100,000 has been infected and less than two per 100,000 have died from the virus." -- *Slovakia*. "21 per 100,000 people have caught it and just 0.2 per 100,000 have succumbed to the illness."
- Universal Masking is Urgent in the COVID-19 Pandemic: SEIR and Agent Based Models, Empirical Validation, Policy Recommendations – prepublication 4/21 by De Kai, PHD MBA, et. al. posted May 12 (PDF, 19 pages)
- University of Illinois tested 10 different fabrics and found that the best material for protection and breathing was, the common t-shirt material made of cotton. The study found that they were even better to breathe in than a medical mask. <u>https://news.illinois.edu/view/6367/808377</u>
- Turbulent Gas Clouds and Respiratory Pathogen Emissions: Potential Implications for Reducing Transmission of COVID-19. <u>Published by JAMA</u>, March 26, 2020
- DATA and LIMITATIONS: The factual data provided in this memo is derived primarily from original state government orders and state-funded research sources, with additional references from media sources, as cited. Special acknowledgment to NGA for extensive source materials. The goal is to include a relatively comprehensive, inclusive list. Because of rapidly changing policies and wide variations in those affected, data tables are not an exhaustive list of actions; rather they highlight key actions across states and territories as they prepared for and respond to the COVID-19 pandemic.
- UPDATES: State policy changes are reviewed once a week and new states added. Earlier, first-time required masks include: Colorado (July <u>10</u>), Arkansas (July 20), Mississippi (August <u>4</u> & July 20) Alabama (July <u>16</u>), Ohio (July <u>17</u>), Indiana (July <u>27</u>), Minnesota (July <u>25</u>), Montana (July <u>15</u>), Kentucky (July <u>10</u>), Texas (July <u>3</u>), Kansas (July <u>3</u>), Louisiana (July <u>13</u>) and Wisconsin (August <u>1</u>).

#### **Notes and Sources:**

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<sup>2</sup> Author: Richard Cauchi is an independent health policy advisor. Previously he was Health Program Director at the National Conference of State Legislatures (NCSL) leading research and communication on state health coverage, regulation, access, and financing, from 1997 to Jan. 2019. This memo was prepared on a pro-bono basis, based on government actions and is <u>not</u> intended as legal advice or advocacy. Colorado Ideas 2.0 is based in Wheat Ridge, Colorado. © 2020. Distributed under a Creative Commons Attribution Non-Commercial License 4.0 (CC BY-NC).

<sup>3</sup> -NEW- "National Strategy for the COVID-19 Response and Pandemic Preparedness," Executive Summary posted by The White House on Jan. 21, 2021; Full Text (200 pp) also as reported by NY Times and other major media.

<sup>4</sup> Cumulatively, between March 15 and May 30, 2020 at least 33 states and territories, plus major cities and counties in California, Colorado, Texas, Washington plus other locations not listed here. Counting states and cities with required masks for some employees, at least 42 states have or have

<sup>&</sup>lt;sup>1</sup> In this document the term "masks" includes "cloth face coverings" (CDC-approved designs and informal solutions such as cloth scarfs and bandanas), and the range of commonly used "medical masks" and N95 masks approved by OSHA for various industrial or medical uses. Medical and N95 masks have been in short supply, and are still discouraged for casual public use. Individuals sometimes own and wear non-sterile medical masks and generally may use them safely without conflicting with guidance on donations. Exceptions or exemptions to mask wearing typically include "young children under the age of 2, anyone who has trouble breathing, or is unconscious, incapacitated, or otherwise unable to remove the mask without assistance."

had some mandatory mask rule, but not always during the same weeks. Regional or city-only actions added in June-July, plus numerous temporary adjustments and amendments in November, make a precise 50-state count more difficult. Varied definitions of children (e.g. 0-2 or 0-9) and medically defined exemptions also affect population totals.

<sup>5</sup> Governing magazine "Lawmakers get tough with mask requirements", 9/11/2020. "New Jersey and Pennsylvania would make the refusal to wear a mask a crime. It's a sign that consensus regarding the value of mask wearing has grown, but states are still unsure on penalties."

<sup>6</sup> National Governors Association (NGA); <u>Coronavirus overview webpage</u> |

- State Action Tracking Chart: State Face Coverings Policies Spreadsheet Xcel -update- January 15, 2021
- NGA: Business Reopening Strategies: 50-state table Sept. 2020

<sup>7</sup> Masks4All is a non-profit research project <u>tracking state and local activities</u>; they placed a full-page ad on July 12 headlined "Over 100 Prominent Health Experts Call for Universal Mask Requirements."

<sup>8</sup> See New Jersey order for an example of medical and practical exceptions to a mandatory order.

<sup>9</sup> Joint research by Boston University, NYU and Bowdoin College and NGA, via offline data. Expanded source data <u>updated</u>; <u>available on request.</u> Cite as Raifman J, et al. (2020). "COVID-19 US state policy database." Accessed by author 9/11/2020.

<sup>10</sup> CNN online, April 20, 2020. Dr. S. Gupta on "How to make your own mask at home."

<sup>11</sup> ASTHO (Association of State and Territorial Health Officials) is tracking guidance on testing prioritization, elective medical procedures and other public health policies on their <u>COVID-19 Response Hub</u>.

<sup>12</sup> NGA and ASTHO: <u>Roadmap to Recovery</u>, April 21, 2020.

<sup>13</sup> "Where states reopened and cases spiked after the U.S. shutdown" <u>published summary</u> by The Washington Post, July 23, 2020.

<sup>14</sup> New York Times: <u>See Coronavirus Restrictions and Mask Mandates for All 50 States</u>. Nov. 13, 2020, updated periodically.

<sup>15</sup> National Association of County and City Health Officials (NACCHO's) Main site: <u>https://www.naccho.org/</u>; Coronavirus Resources for Local Health (updated frequently) at <u>covid19-naccho.hub.arcgis.com/</u>

<sup>16</sup> Minnesota: Lieutenant Governor Peggy Flanagan. "We <u>must</u> continue to stay home, practice safe social distancing, and wear cloth masks while in public so we can carefully and responsibly turn the dial toward reopening society."

<sup>17</sup> New York State Executive Order 202.17, signed by Gov. Andrew M. Cuomo. 4/15/2020.

<sup>18</sup> National Conference of State Legislatures (NCSL) <u>https://www.ncsl.org/research/health/state-action-on-coronavirus-covid-19.aspx</u> (state legislation and enacted laws only)

<sup>19</sup> CDC "Use of Cloth Face Coverings to Help Slow the Spread of COVID-19" "<u>CDC recommends</u> wearing cloth face coverings in public settings where other social distancing measures are difficult to maintain (e.g., grocery stores and pharmacies), especially in areas of significant community-based transmission."

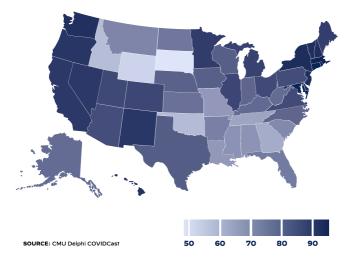
<sup>21</sup> The Lancet "Wearing face masks in the community during the COVID-19 pandemic: altruism and solidarity." Online April 16, 2020

<sup>22</sup><sup>22</sup> CNN: "The psychology behind why some people won't wear masks." May 6, 2020

#### Where Americans are wearing masks:

Map below reprinted from Biden <u>"National Strategy... COVID Response</u> and Pandemic Preparedness<u>" (p. 56)</u> January 2021 Also see <u>an interactive county map</u> by The New York Times (click link to enlarge)

# Respondents Reporting that Community Members Wear Masks All or Most of the Time



**Download the latest update of this report:** <u>https://www.colorado2.com/Policies on Required Masks Cl2.pdf</u> © 2020-21. Distributed under a Creative Commons Attribution Non-Commercial License 4.0 (CC BY-NC). Published by Colorado Ideas 2.0, LLC

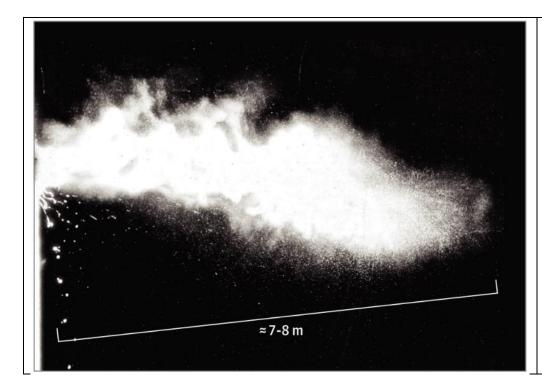
Latest through January, with Biden updates -- Print update 1/22/2021, pm

#### Appendix A – Mask effectiveness graphics

(a) (b) (c) (d)

Visualizing the effectiveness of face masks in obstructing respiratory jets (note positive result compared to no mask)

FIG. 4. (a) A homemade face mask stitched using two-layers of cotton quilting fabric. Images taken at (b) 0.2 seconds, (c) 0.47 sec., and (d) 1.68 sec. after the initiation of the emulated cough (**Source**: Florida Atlantic Univ. <u>Physics of Fluids</u> Journal: published June 30, 2020; <u>https://aip.scitation.org/doi/10.1063/5.0016018</u>



# Human Sneeze "Multiphase turbulent gas cloud"

Demonstrates the spread of infected breath up to 27 feet – with no mask or face covering.

<u>Source:</u> Author: Lydia Bourouiba, PhD, Massachusetts Institute of Technology, JAMA, online March 26; 2020

**14 Masks Compared** Read graph below and full text <u>report</u> for results (<u>PDF repost</u>)

Mask, Name	Description
1, 'Surgical' *	Surgical mask, 3-layer
2, 'Valved N95'	N95 mask with exhalation valve
3, 'Knitted'	Knitted mask
4, <b>'PolyProp'</b>	2-layer polypropylene apron mask
5, 'Poly/Cotton'	Cotton-polypropylene-cotton mask
6, 'MaxAT'	1-layer Maxima AT mask
7, 'Cotton2'	2-layer cotton, pleated style mask
8, 'Cotton4'	2-layer cotton, Olson style mask
9, 'Cotton3'	2-layer cotton, pleated style mask
10, 'Cotton1'	1-layer cotton, pleated style mask
11, 'Fleece'	Gaiter type neck fleece
12, 'Bandana'	Double-layer bandana
13, 'Cotton5' *	2-layer cotton, pleated style mask
14, 'Fitted N95'	N95 mask/no exhale valve, fitted

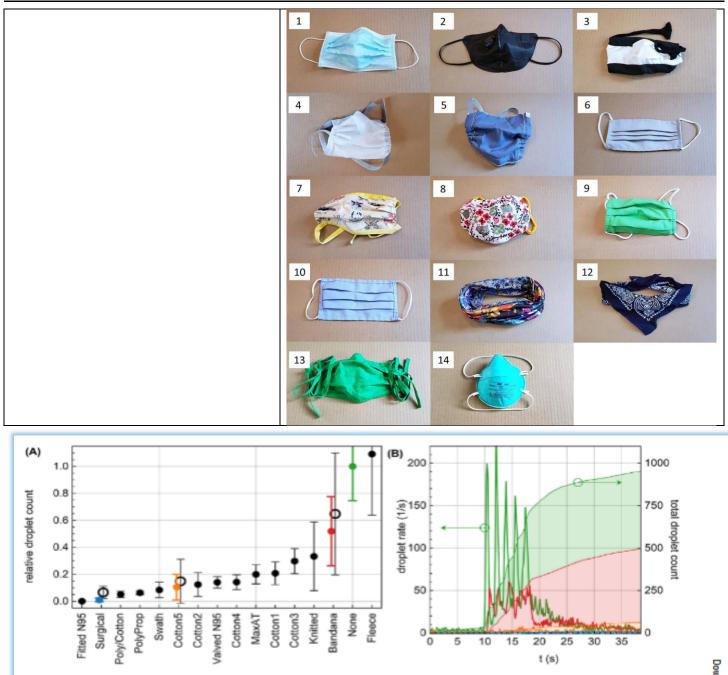


Fig. 3. Droplet transmission through face masks. (A) Relative droplet transmission through the corresponding mask. Each solid data point represents the mean and standard deviation over 10 trials for the same mask, normalized to the control trial (no mask), and tested by one speaker. The hollow data points are the mean and standard deviations of the relative counts over four speakers. A plot with a logarithmic scale is shown in Supplementary Fig. S1. (B) The time evolution of the droplet count (left axis) is shown for representative examples, marked with the corresponding color in (A): No mask (green), Bandana (red), cotton mask (orange), and surgical (blue – not visible on this scale). The cumulative droplet count for these cases is also shown (right axis).