

Rachel Yoho

From: Michele Lieberman
Sent: Monday, May 11, 2020 8:29 AM
To: Rachel Yoho
Cc: Sylvia Torres
Subject: FW: Mask scientific research summary

Rachel

The Chair would like this added to the backup along with any other commissioners that they have sent. I believe Cornell asked for his in the backup.



* Board Certified in City, County and Local Government Law

From: hutchrk@aol.com <hutchrk@aol.com>
Sent: Monday, May 11, 2020 7:46 AM
To: Michele Lieberman <mlieberman@alachuacounty.us>; Sylvia Torres <STorres@alachuacounty.us>; Paul Myers <paul.myers@flhealth.gov>; BOCC (Only Commissioners) <BOCC@alachuacounty.us>
Cc: Latoya T. Gainey <lgainey@alachuacounty.us>; Mark Sexton <msexton@alachuacounty.us>; Bob Swain <bswain@alachuacounty.us>
Subject: Mask scientific research summary

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MEMO

To: Board of County Commissioners

Copy: Michele Lieberman, County Manager
Sylvia Torres, County Attorney
Paul Myers, County Public Health Director

Date: May 11, 2020

Subject: Recent scientific literature regarding masks

As I have communicated with numerous citizens and officials since the pandemic began to impact Alachua

County, we are a community which understands science, that values expertise, and will come together through this if we work for a common purpose based on data and facts. Therefore, I have been surprised that facial coverings have become such a divisive issue.

With a few friends, I was discussing a phrase from the writer/historian Francis Fukuyama: "Is it possible for mankind to reverse the directionality of history through the rejection or loss of the scientific method?" One of my friends, a scientist, volunteered to do a comprehensive literature search into the current science regarding masks. What follows is my social media post just after Alachua County's mask order became effective, followed by the listing of scientific literature, unedited by me and updated as of May 10th, provided by Mark Stowe who worked tirelessly on this project.

This submission is also intended to comply with public record requests regarding information that I considered when approving our Emergency Order regarding masks, and may provide additional information to our legal team.

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Robert Hutchinson post to Facebook:

May 5 at 12:56 PM ·

The Alachua County Commission enacted an emergency order requiring people to wear masks when they are interacting with others in public places. Some people – such as infants and those with mental or physical conditions that make it difficult to wear masks are exempted.

The arguments we've received from people who don't want to wear masks in public are:

- masks don't work
- you can't tell me what to do
- if you require masks, then you have to provide them, and
- why weren't they required earlier

Here's my brief response to these points:

1. Masks do reduce but not eliminate the spread of the coronavirus. They are the front line of a range of efforts that include frequent hand washing, temperature screening, abundant tests with quick and accurate results, rapid and thorough contact tracing, effective isolation, and eventually a vaccine. Of all of these, masks are the only outwardly visible signal that you are contributing to the solution. And for essential workers such as first responders, store clerks, and personal service providers who come in close proximity to dozens or hundreds of strangers each day, masks are also a sign of respect that you recognize their risk and are doing something to lower it.

2. Local governments, under the current state of emergency, have the authority to enact more protective measures than those rolled out by the State. This has been confirmed by the Governor's

office by people who have checked with them, including some who were considering legal challenges. The State of Florida has preempted its local governments from opening businesses, facilities, or activities which the State has ordered to be closed.

3. Local government agencies are not required to provide masks or other protective gear, and in many cases employers are not providing them even if they require them. This is not dissimilar to protective equipment like steel-toed shoes, safety goggles, hard hats, and other stuff that some workers are expected to wear to job sites. However, some agencies are attempting to find supplies of masks that they can provide to people so they won't be turned away, and some businesses may do the same for their customers especially as supply chains for masks become more robust and costs return to normal.

4. In the early phase of the pandemic, we didn't mandate masks for a couple of reasons. First, there was conflicting information about their effectiveness, but today there is consensus from most authorities that the benefits of widespread mask usage outweigh their costs and inconvenience. And secondly, during the six weeks of the stay-at-home phase, there were substantially fewer people out and about, and this social distancing flattened the curve of the infection rate. In this first phase of re-opening, with all retail, plus restaurants, construction sites, and many other activities back in operation, it is very likely that the epidemic will re-kindle unless we take proactive measures to reduce its person-to-person spread – and masks are one part of the strategy that each of us can do.

It deeply troubles me that store clerks are being threatened by those who are too selfish or inconsiderate to be part of the solution rather than part of the problem. And those who say they would wear a mask only if you suggest we do, but will refuse if you tell us we have to, are engaging in juvenile temper tantrums. We are all frustrated, but taking it out on store clerks is simply indecent.

And then there's folks who have said they would comply if the President or Governor say we have to, but not if local officials do. I wish those at the top were making it easier by leading, but from my vantage point, local governments are doing the best that we can with the information and resources we have, and have shown creativity, flexibility, and transparency to the best of our abilities.

Thank you for your efforts, large and small, to work together towards a full and safe recovery for our community.

Robert Hutchinson

Alachua County Commissioner

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E-mail received from Mark Stowe to Robert Hutchinson, May 11, 2020:

The following are all the professional literature articles I found after doing a search in

scholar.google.com (which fairly exhaustively covers journal publications from around the world, as well as publications by governments and scientific organizations). I searched for the keywords facemask and covid19 and sorted by date and used only hits from April and May this year, including many preprints. I have not used papers concerning masks in the hospital setting - just general public use of any kind of mask. I found that clearly pro-mask hits outnumbered equivocal- to- tepid- support hits almost three to one, (48 positive 16 neutral 3 negative)

All links lead to the full article (or look for “download pdf” or similar - all journals are making Covid19 related publications open access). Excerpts reflect the article’s viewpoint, and for some articles indicate that they describe simple ways to make masks (including some novel designs). Some articles point out that all airlines (or at least all US airlines) are requiring the use of facemasks.

Unambiguously promask hits

Published articles and reviews and preprints that argue for masks

To mask or not to mask: Modeling the potential for face mask use by the general public to curtail the COVID-19 pandemic

Infectious Disease Modelling Volume 5, 2020, Pages 293-308
<https://www.sciencedirect.com/science/article/pii/S2468042720300117>

.....broad adoption of even relatively ineffective face masks may meaningfully reduce community transmission of COVID-19 and decrease peak hospitalizations and deaths

Community Universal Face Mask Use during the COVID 19 pandemic—from households to travelers and public spaces

J Travel Med. 2020 Apr 18 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7188149/>

... that mask use in the community has no benefit, and should only be used by sick patients (also referred to as “source control” (3)). Such messaging may be driven more by concerns about critical shortages of personal protective equipment for health workers than by scientific evidence. In fact there are more large randomized, controlled clinical trials (RCTs) of face mask use in the community than there are of use by sick people or “source control”.

Efficacy of face mask in preventing respiratory virus transmission: a systematic review and meta-analysis

(Preprint) <https://www.medrxiv.org/content/10.1101/2020.04.03.20051649v2.abstract>

..... A total of 21 studies met our inclusion criteria. Meta-analyses suggest that mask use provided a significant protective effect (OR = 0.35 and 95% CI = 0.24-0.51).

Applying principles of behaviour change to reduce SARS-CoV-2 transmission

Nat Hum Behav (2020). <https://www.nature.com/articles/s41562-020-0887-9>

.....we urgently need effective interventions to increase adherence to behaviours that individuals in communities can enact to protect themselves and others: use of tissues to catch expelled droplets from coughs or sneezes, use of face masks as appropriate,

Universal Masking is Urgent in the COVID-19 Pandemic:SEIR and Agent Based Models, Empirical Validation, Policy Recommendations

physics.soc-ph 22 Apr 2020 <https://arxiv.org/pdf/2004.13553.pdf>

.....Taken in tandem, our theoretical models and empirical results argue for urgent implementation of universal

masking in regions that have not yet adopted it as policy

Mathematical assessment of the impact of non-pharmaceutical interventions on curtailing the 2019 novel Coronavirus

Mathematical Biosciences Volume 325, July 2020, 108364

<https://www.sciencedirect.com/science/article/pii/S0025556420300560>

.....High use of face-masks in public could lead to COVID-19 elimination.

The Case for Universal Cloth Mask Adoption and Policies to Increase Supply of Medical Masks for Health Workers

(Preprint from Yale) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3567438

.....We recommend the immediate universal adoption of cloth facemasks, including homemade

Face masks for the public during the covid-19 crisis

BMJ 2020;369:m1435

https://www.zora.uzh.ch/id/eprint/187180/1/Greenhalgh_Schmid_FaceMasks_bmj_2020_Neo_USZ.pdf

..... in the face of a pandemic the search for perfect evidence may be the enemy of good policy. As with parachutes for jumping out of aeroplanes,³⁸ it is time to act without waiting for randomised

controlled trial evidence.³⁹ A recently posted preprint of a systematic review came to the same conclusion.⁴⁰ Masks are simple, cheap, and potentially effective.

Airborne transmission of SARS-CoV-2: The world should face the reality

Environment International Volume 139, June 2020, 105730

<https://www.sciencedirect.com/science/article/pii/S016041202031254X>

..... in particular masks and respirators should be recommended, to be used in public places where density of people is high

Masks and thermometers: Paramount measures to stop the rapid spread of SARS-CoV-2 in the United States

Genes & Diseases 25 April 2020

<https://www.sciencedirect.com/science/article/pii/S2352304220300635>

.....We believe that masks and thermometers are key measures

A Rapid Systematic Review Of The Efficacy Of Face Masks And Respirators Against Coronaviruses And Other Respiratory Transmissible Viruses For The Community, Healthcare Workers And Sick Patients

International Journal of Nursing Studies 30 April 2020, 103629

<https://www.sciencedirect.com/science/article/pii/S0020748920301139>

.....The study suggests that community mask use by well people could be beneficial, particularly for COVID-19,

The Practice of Wearing Surgical Masks during the COVID-19 Pandemic

EID Journal Volume 26 https://wwwnc.cdc.gov/eid/article/26/8/20-1498_article

.....the wearing of masks by healthy persons may prevent potential asymptomatic or presymptomatic transmission (3). This marginal reduction in transmission may produce substantial results, particularly when implemented early.

Ontarians Need to Rapidly Increase their Personal Protection and Testing to Mitigate the COVID-19 Spread in the Province

(Preprint) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3569731

.....We show that the adoption of personal protective equipment and rapid testing may be key to achieve control of COVID-19 in Ontario.

Face Masks Against COVID-19: An Evidence Review

(Preprint) https://www.preprints.org/manuscript/202004.0203/v1?fbclid=IwAR37tSbzMXeOSV-hm76KLi_dgSijxc8IOAHJ1HyYb4TrWGXhOHMsQMvgDQk

.....We recommend that public officials and governments strongly encourage the use of widespread face masks in public, including the use of appropriate regulation.

COVID-19 and Face Masks – To Use or Not to Use!

Indian J Comm Health. 2020;32(2-Special Issue):240-243.

https://www.researchgate.net/profile/Devraj_Ramakrishnan/publication/340792638_COVID-19_and_Face_Masks_-_To_Use_or_Not_to_Use/links/5e9dd709299bf13079ad7b1d/COVID-19-and-Face-Masks-To-Use-or-Not-to-Use.pdf

Along with mask use, practicing all other preventive measures such as handwashing, cough etiquette, social distancing, quarantine and isolation are of utmost importance,

Covid-19 Preventative Measures Bandanas As Cloth Face Coverings

(UF IFAS Extension FSHN20-32) <https://journals.flvc.org/edis/article/view/121781/120582>

.....Cloth face coverings can be an effective way of preventing spread of infectious diseases.

Masks and Coronavirus Disease 2019 (COVID-19)

(Journal of the American Medical Association patient advice)
<https://jamanetwork.com/journals/jama/fullarticle/2764955>

.....Primary benefits of wearing a mask include limiting the spread of the virus from someone who knows or does not know they have an infection to others.

Flow analyses to validate SARS-CoV-2 protective masks

(Preprint of German fluid mechanics engineering study with lots of photos) https://www.unibw.de/lrt7-en/report_mask-investigation_unibw_lrt7_06_04_2020.pdf

.....Finally, the last part of the video shows how a particle-filtering protective mask can be manufactured very easily, quickly and inexpensively and how it must be worn in order to provide reliable protection. The material costs for such a mask are about 50 cents and the production takes about 5 minutes with some practice.

Aerosol Particles Laden with COVID-19 Travel Over 30m Distance

(Preprint) <https://www.preprints.org/manuscript/202004.0546/v1>

.....For example, a person in a public place (e.g. supermarket or car park) can accumulate in the respiratory system up to 200 virus copies in 2 min time by breathing in virus laden aerosols. Wearing face mask considerably reduces the deposited load down to 2 virus copies per 2 min.

The Psychology of Wearing Face Masks in Times of the COVID-19 Pandemic

(Preprint) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3584834

.....The more people use masks, the less strange it feels for the people to wear masks and so the higher the acceptance for using them in a sustainable way. This assists to efficiently and effectively reduce the risk of infecting others.

Modelling SARS-COV2 Spread in London: Approaches to Lift the Lockdown

(Preprint) <https://www.preprints.org/manuscript/202005.0055>

.... the best strategy seems to be a combination of weekly universal testing, contact tracing and use of facemasks, with concurrent lockdown. This approach could potentially reduce deaths by 76% compared with continued lockdown alone.

The use of facemasks by the general population to prevent transmission of Covid 19 infection: A systematic review.

(Preprint) <https://www.medrxiv.org/content/10.1101/2020.05.01.20087064v1>

.....Conclusion Theoretical, experimental, and clinical evidence suggested that usage of face masks in a general population offered significant benefit in preventing the spread of respiratory viruses especially in the pandemic situation

A reality check on the use of face masks during the COVID-19 outbreak in

Hong Kong

EClinicalMedicine 000 (2020) 100356 [https://www.thelancet.com/pdfs/journals/eclinm/PIIS2589-5370\(20\)30100-0.pdf](https://www.thelancet.com/pdfs/journals/eclinm/PIIS2589-5370(20)30100-0.pdf)

.....mass masking in the community is one of the key measures that controls transmission during the outbreak in Hong Kong and China.....

Over view for the truth of COVID -19 pandemic: A guide for the Pathologists, Health care workers and community'

(Preprint) <https://pjms.org.pk/index.php/pjms/article/download/2519/542>

Conclusion: Hand washing, using face masks, adopting respiratory etiquette, and cleaning surface and objects, social distancing and travel measures can protect us from the COVID19.

The Covid-19 Crisis and the need for suitable face masks for the general population

(Preprint) https://www.researchgate.net/publication/341057183_The_Covid-19_Crisis_and_the_need_for_suitable_face_masks_for_the_general_population

.....The question is not should the general public have mask protection but what degree of mask protection is needed?

A Simple Homemade Cloth Mask for Mass People in Covid-19: Salt-Starching Treatment on Fabric for Better Bioaerosol Filtration Efficiency

(Preprint)

https://www.researchgate.net/profile/M_Mehedi_Rocky/publication/341105738_A_Simple_Homemade_Cloth_Mask_for_Mass_People_in_Covid-19_Salt-Starching_Treatment_on_Fabric_for_Better_Bioaerosol_Filtration_Efficiency/links/5eadc09392851cb2676f9323/A-Simple-Homemade-Cloth-Mask-for-Mass-People-in-Covid-19-Salt-Starching-Treatment-on-Fabric-for-Better-Bioaerosol-Filtration-Efficiency.pdf

..... facial mask, use of which is equally vital, if not more, than social-distancing, sheltering-in-place, and other vast measures widely used across the world to slow the spread of COVID-19. A simple way to make a mask of improved filtration efficiency at home is presented using cotton or linen woven fabric available in wearable cloth or household napkin. Filtration efficacy was improved by salt-starch treatment. Starch increases the efficiency of pathogenic droplet absorption by the fabric, whereas salt improves the virus deactivation system.

Why we should wear face masks to tackle COVID-19

(Preprint)

https://www.researchgate.net/profile/Anthony_Webster3/publication/340869960/Why_we_should_we_ar_face_masks_to_tackle_COVID-19/links/5ea2d7eb92851c87d1b10ce7/Why-we-should-wear-face-masks-to-tackle-COVID-19.pdf

.....Despite the uncertainties, the likely cost of basic masks seems very low compared to their possible benefit in terms of lives saved, especially if they are used when we are leaving “lockdown”.

Evidence-based, cost-effective interventions to suppress the COVID19 pandemic: a rapid systematic review

(Preprint) <https://www.medrxiv.org/content/medrxiv/early/2020/04/24/2020.04.20.20054726.full.pdf>

social distancing is effective but costly, especially when adopted late and (2) adopting as early as possible a combination of interventions that includes hand washing, face masks, swift contact tracing and case isolation, and protective equipment for healthcare workers is likely to be the most cost-effective strategy.

Wearing Face Masks — the Simple and Effective Way to Block the Infection Source of COVID-19

CCDCWeekly <http://weekly.chinacdc.cn/en/article/doi/10.46234/ccdcw2020.069>

.....wear face masks” is a simple, feasible, and low-cost method of blocking the infection source and can result in the epidemic being effectively controlled as evidenced in China and the Republic of Korea.

Evidence to Support Wearing Masks Is Helpful During the COVID-19 Pandemic

(Preprint) <https://osf.io/e58mr/download?format=pdf>

.....Although wearing masks should never replace or substitute other effective measures recommended by public health agencies and experts, the evidence in Asian countries suggests that it might additionally enhance the efficacy of preventive measures in today’s detrimental COVID-19 outbreak.

Transmission Mode and Infection Mode decide Evacuated Quarantine

(Preprint)

https://www.researchgate.net/profile/Li_Yuan_Liu/publication/340941325_Transmission_Mode_and_Infection_Mode_decide_Evacuated_Quarantine/links/5ea6b99c45851553fab2e352/Transmission-Mode-and-Infection-Mode-decide-Evacuated-Quarantine.pdf

.....As a sum, we suggest selective evacuation and mandatory wearing masks:

A Comfortably Vented, Ingeniously Designed (COVID) Fabric Helmet for Curbing Infection Spread in Community Settings

(Preprint) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3577540

.....the need of protective gear such as facemasks assumes utmost importance, for the common populace,

Face mask use in the general population and optimal resource allocation during the COVID-19 pandemic

(Preprint) <https://www.medrxiv.org/content/medrxiv/early/2020/04/07/2020.04.04.20052696.full.pdf>

In summary, face mask use, particularly for a pathogen with relatively common asymptomatic carriage, can effectively provide some mitigation of transmission,

Public use of face masks to control the coronavirus (SARS-Cov-2) pandemic: a review of theory and evidence

(Preprint) https://www.preprints.org/manuscript/202004.0021/download/final_file

Homemade cloth face masks to fight the COVID19 pandemic; a call for mass public masking with homemade cloth masks

(Preprint) <https://osf.io/preprints/socarxiv/grbzj/download>

**Professional journal editorials that argue for masks
(I found the last one particularly poignant and compelling)**

The Time for Universal Masking of the Public for Coronavirus Disease 2019 Is Now

Open Forum Infectious Diseases, Volume 7, Issue 4, April 2020

<https://academic.oup.com/ofid/article/7/4/ofaa131/5820544>

In conclusion, we strongly endorse universal public masking in the United States for crowded indoor or public spaces, including supermarkets, public gatherings, and in close workplaces. This recommendation does not replace our population-level, public health approaches, including social distancing in the short term, but it does serve as an adjunct, with the hope that we will be able to relax such measures as transmission slows

Rationale for universal face masks in public against COVID-19

Respirology (2020) 13834 <https://onlinelibrary.wiley.com/doi/pdf/10.1111/resp.13834>

.....Weighing up all these considerations, there is modest evidence to support widespread community use of universal masking, which includes cloth masks to help reduce transmission of SARS-CoV-2.

Public Masking: An Urgent Need to Revise Global Policies to Protect against Novel Coronavirus Disease (COVID-19)

Am. J. Trop. Med. Hyg., 00(0), 2020, pp. 1–2

[https://web.archive.org/web/20200509164221/http://pr.tums.ac.ir/uploads/1/2020/Apr/23/Keshtkar-Mark-Holakouie_Editorial_Pulic%20Masking%20\(1\).pdf](https://web.archive.org/web/20200509164221/http://pr.tums.ac.ir/uploads/1/2020/Apr/23/Keshtkar-Mark-Holakouie_Editorial_Pulic%20Masking%20(1).pdf) (webarchive copy of a preprint hosted in Iran which has been devastated by the virus and where the server is down)

Universal use of face masks for success against COVID-19: evidence and implications for prevention policies

Eur Respir J 2020; in press <https://erj.ersjournals.com/content/erj/early/2020/04/27/13993003.01260-2020.full.pdf>

....However, in blanket testing of an isolated village of approximately 3,000 people in northern Italy, 50%-75% of people with positive pharyngeal molecular tests were totally asymptomatic [1]. This finding was echoed by a more recent daily surveillance report from China, where all people arriving from overseas were rigorously tested [2]: among 166 persons with newly identified infections, 78% were asymptomatic. With the large number of asymptomatic patients unaware of their own infection [1,2], the comparable viral load in their upper respiratory tract [3], droplet and aerosol dispersion even during talking and breathing [6], and prolonged viral viability outside our body [7], we strongly advocate universal use of face mask as a means of source control in public places during the COVID-19 pandemic. Extreme forms of social distancing is not sustainable, and complete lockdown of cities or even whole countries is extremely devastating to the economy. Universal masking in public complements social distancing and hand hygiene in containing or slowing down the otherwise exponential growth of the pandemic. Universal masking protects against cross transmission through

unavoidable person-to-person contact during the lockdown and reduces the risk for resurgence during relaxation of social distancing measures on reopening.

Use of facemasks to limit COVID-19 transmission

Epidemiol. Serv. Saúde 29 (2) 22 Apr 2020

<https://www.scielosp.org/article/ress/2020.v29n2/e2020023/en/>

.....Community transmission could be reduced if everyone, including asymptomatic and contagious people, used facemasks.

Wearing face masks in the community during the COVID-19 pandemic: altruism and solidarity

[https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(20\)30918-1.pdf](https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(20)30918-1.pdf)

.....Mass masking for source control is in our view a useful and low-cost adjunct to social distancing and hand hygiene during the COVID-19 pandemic.

Covid-19: should the public wear face masks?

BMJ 2920;369:m1442 <http://press.psprings.co.uk/bmj/april/facemasksedit.pdf>

.....As we prepare to enter a “new normal,” wearing a mask in public may become the face

of our unified action in the fight against this common threat and reinforce the importance of social distancing measures

The COVID-19 outbreak: The issue of face masks

Infection Control & Hospital Epidemiology <https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/covid19-outbreak-the-issue-of-face-masks/76DD0766082548F9BEF74FF85B152324/core-reader>

..... 3 measures should be undertaken: (1) improve the supply of masks; (2) promote public awareness about how to deal with discarded masks; (3) carry out innovation to improve masks.

Cloth face covers – a sustainable measure to mitigate COVID-19

(Preprint) https://www.theunion.org/news-centre/news/body/IJTL-D-June-0220_Letter_Jindal-FINAL.pdf

.....the use of cloth masks or any alternate cover by the general public seems a practical health intervention.

<http://apiindia.org/wp-content/uploads/pdf/corona-virus/review-article-on-mask.pdf>

***<https://journals.sagepub.com/doi/full/10.1177/0890117120922037>

Govt blogs etc that are pro-mask

Uso De Barbijos (Mascarillas) En La Pandemia Por Covid-19

<http://cimenuuevo.blogs.fcq.unc.edu.ar/wp-content/uploads/sites/15/2020/04/Informe-CIME-uso-de-barbijos-COVID-19-22-04-20.pdf>

Why NZ should consider adopting “mass masking” as an additional step to speed elimination of the Covid-19 pandemic <https://sciblogs.co.nz/public-health-expert/2020/04/22/why-nz-should-consider-adopting-mass-masking-as-an-additional-step-to-speed-elimination-of-the-covid-19-pandemic/>

Department of Health recommends the use of masks during COVID-19

<https://www.foodfocus.co.za/home/whats-hot/Corona-Virus/Department-of-Health-recommends-the-use-of-masks-during-COVID19>

Articles that take a more neutral stance

If right kind and used correctly yes

<https://pubs.acs.org/doi/full/10.1021/acsnano.0c03252>

Tepid yes but still needs study

<https://onlinelibrary.wiley.com/doi/epdf/10.5694/mja2.50602>

Public use of face masks to control the coronavirus (SARS-Cov-2) pandemic: a review of theory and evidence

(Preprint) https://www.preprints.org/manuscript/202004.0021/download/final_file

Presents arguments for and against seems to learn towards for

<https://ipatec.conicet.gov.ar/wp-content/uploads/sites/72/2020/04/Documento-Tecnico-IPATEC-V4.pdf>

http://cienciorama.unam.mx/a/pdf/634_cienciorama.pdf

Role of Mask/Respirator Protection Against SARS-CoV-2

Anesth Analg. 2020 Apr 20 : <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7173698/>

Effectiveness of manufactured surgical masks, respirators, and home-made masks in prevention of respiratory infection due to airborne microorganisms

The Southwest Respiratory and Critical Care Chronicles 2020;8(34):11–26

<https://pulmonarychronicles.com/index.php/pulmonarychronicles/article/download/675/1525>

Maybe yes maybe no needs more study

<https://www.nap.edu/read/25776/chapter/1>

<https://www.medrxiv.org/content/medrxiv/early/2020/04/14/2020.04.09.20058859.full.pdf>

The flow physics of COVID-19

J. Fluid Mech. (2020), vol. 894, F2 <https://www.cambridge.org/core/services/aop-cambridge-core/content/view/476E32549012B3620D2452F30F2567F1/S0022112020003304a.pdf/div-class-title-the-flow-physics-of-covid-19-div.pdf>

Pros and Cons needs more study takes no stand

Masking During the COVID-19 Pandemic

https://ncceh.ca/sites/default/files/Masking%20during%20the%20pandemic_NCCEH%20April%202020.pdf

Concerns around public health recommendations on face mask use among individuals who are not medically diagnosed with COVID-19 supported by a systematic review search for evidence.

(Preprint) <https://europepmc.org/article/ppr/ppr150003>

RE: Face mask and COVID-19

(Letter to editor) <https://www.cmaj.ca/content/re-face-mask-and-covid-19>

Couldn't find evidence of benefit

Impact of non-pharmaceutical interventions against COVID-19 in Europe: a quasi-experimental study

(Preprint) medRxiv 2020.05.01.20088260

<https://www.medrxiv.org/content/10.1101/2020.05.01.20088260v1.full.pdf>

Face masks to prevent community transmission of viral respiratory infections: A rapid evidence review using Bayesian analysis

(Preprint) <https://www.qeios.com/read/1SC5L4>

Mixed leaning towards negative

Face masks for the public during Covid-19: an appeal for caution in policy

(Preprint) <https://osf.io/preprints/socarxiv/uyzxe/>

Facemasks and the Covid 19 pandemic: What advice should health professionals be giving the general public about the wearing of facemasks?

(Editorial) *Nursing & Health Sciences*. <https://onlinelibrary.wiley.com/doi/abs/10.1111/nhs.12724>

Q. Are cloth masks safe and effective for preventing the spread of COVID-19?

(Answer to online question) <http://mdanderson.libanswers.com/faq/293442>

#