### VARIOUS FACE MASK STUDIES PROVE THEIR INEFFECTIVENESS

#### 1. Surgical mask/cloth face muk studies

## Community and Cloee Contact Expolurw <u>Allodeted</u> with COVID-19 Among 5'/mptomatic Adults 2:18 Y-.ra In Outpatient Health Care Facilities - United States, July 2 0 2 0

The US Centre for Disease Control performed a study which showed that 85 percent of those who contracted Covid-19 during July 2020 were mask wearers. Just 3.9 percent of the study participanets never wore a mask.

Original: https://www.cdc.gov/mmwr/volumes/6 9/ wr/pdfs/mm6936a5-H .pdf

Erratum. correction:

 $\frac{\text{https:// www.cdc.goy/mmwr/vo!umes/G9/wr/mm6938a7.htm?s cid,,.mm6938a7}}{\text{https:// www.theblaze.com/op-ed/horowitz-cdc-study-covid-masks}} \; \underline{\textbf{W}}$ 

### 2. Facial protection for healthcare workers during pandemics: a scoping review

This study used 5462 peer-reviewed articles and 41 grey literature records.

"Condusion: The COVID-19 pandemic has led to critical shortages of medical-grade PPE. Alternative forms of facial protection offer inferior protection. More robust evidence is required on different types of medical-grade facial protection. As research on COVID-19 advances, investigators should continue to examine the impact on alternatives of medical-grade facial protection"

So how is your cloth and surgical mask working again if EVEN medical grade alternatives are failing?

Study Article: https://pubmed.ncbi.nlm.nih.gov/32371 574/

### 3. Physical Interventions to Intern.apt or reduce the spread of respiratory vi,,.\_

"Threeismoderate certainty evidence that wearin9 a mask probably makes little or no difference to the outcome of laboratory-confirmed influenza compared to not wearing a mask"

Study article: https://pubmed.ncbi.nlm.oib.opY/3321\_56.98 /

#### 4. Disposable surgical face masks for preventing surgical wound infection in dean surgery

"We included three trials, involving a total of 2106 participants. There was no statistically significant difference in infection rates between the masked and unmasked group in any of the trials"

Study artid e: <a href="https://pybmed.ncbi.nlm.nih.gov/27115326/">https://pybmed.ncbi.nlm.nih.gov/27115326/</a>

#### 5. Disposable surgical face masks: a systematic review

Two randomised controlled trials were included involving a total of 1453 patients. In a small trial there was a trend towards masks being associated with fewer infections, whereas in a large trial there was no difference in infection rates between the masked and unmasked group:

Study article: https://pubmed.ncbi.nlm.nih.gov/16295987/

### 6. Evaluating the efficacy of doth facemasks in reducing partia, late matter exposure

"Our results suggest that cloth masks are only marginally beneficial in protecting individuals from particles<2.5

Study article: <a href="https://pubmed.ncbLnlm.nih.gov/27531371/">bttps://pubmed.ncbLnlm.nih.gov/27531371/</a>

#### 7. Face seal leakage of half makS and SUrQkal MISks

The filtration efficiency of the filter materials was good, over 95%, for particles above 5 micron in diameter but great variation existed for smaller particles.

Coronavirus is 0.125 microns, therefore these masks wouldn't protect you from the virus"

Study article: <a href="https://pubmed.ncbi.nlm.nib.gov/4014006/">bttps://pubmed.ncbi.nlm.nib.gov/4014006/</a>

## 8, Comparison of the Filter Effidenq, of Medical Nonwoven Fabrics against Three Olffwent Mlaobe Aerosols

"The filter efficiencies against influenza virus particles were the lowest"

"We conclude that the filter efficiency test using the phi-X174 phage aerosol may overestimate the protective performance of nonwoven fabrics with filter structure compared to that against real pathogens such as the influenza virus"

Study article: https://pubmed.ncbi.nlm.nih.gov/29910210/

### 9. Aerosol penetration through surgical masks

"Although surgical mask media may be adequate to remove bacteria exhaled or expelled by health care workers. they may not be sufficient to remove the submicrometer-size aerosols containing pathogens "

Study article: https://pubmed.ncbLnlm.nih.gov/15 24265/

#### 10. Particle removal from e.ir by face rtiMks made from Sterilization Wraps: Effectiveness and Reusability

"We found that  $60\,$  GSM face mask had particle capture efficiency of 94o/o for total particles greater than  $0.3\,$  microns"

How big is the virus again? 0.125 microns.

Study article: <a href="https://pubmed.ncbi.nlm.nih.gov/33052962/">bttps://pubmed.ncbi.nlm.nih.gov/33052962/</a>

### 11. A New Method for Testing Filtnltton Efficiency of Mask Materials Under Sneeze-like Pressure

This study states that "alternatives" like silk and gauze etc could possibly be good options in the pandemic. It's done on !ttarch pa rticles . *Does* not state how big they are either, but they can still get through the material and my research points that starch particles are "big" much bigger than most viruses.

Study article: https://pubmed.ncbi.nlm.nih.gov/32503823/

### 12. Protecting staff against airborne viral partides: In vivo effidency of luer masks

"The laser mask provided significantly less protection than the FFP2 respirator (P=0.02), and only marginally more protection than the surgical mask. The continued use of laser masks for respiratory protection is questionable. Taping masks to the face only provided a small improvement in protection "

Study article: https://pubmed.ncbi.nlm.nib.gov/169 20 222/

## **13. Quantitative Method for Comparative Assessment of Particle Removal Efficiency of Fabric Mliks u** Alternatives to Standard Surgical Masks for PPE

"Worn as designed, both commercial surgical masks and cloth masks had widely varying effectiveness (53 - 75 percent and 28 - 91 percent particle removal efficiency, respectively)". Different brand, different results and only when they applied a "nylon layers" did the "efficiency" improve. Synthetic fibres do not breathe, so this will inevitably effect your breathing.

Study artide: <a href="https://pubmed.ncbi.nlm.nib.gov/32838296/">bttps://pubmed.ncbi.nlm.nib.gov/32838296/</a>

### 14. The effk:ac:y of standard surgical face masks: an investigation using "tracer partides"

"Since the microspheres were not identified on the exterior of these face masks, they must have escaped around the mask edges and found their way into the wound" human albumin cells aka aborted fetal tissue, is much larger than the virus and still escaped the mask.

Study article: <a href="https://pubmed.ncbi.nlm.nih.gov/7379387/">https://pubmed.ncbi.nlm.nih.gov/7379387/</a>

### 15. Testing the efficacy of homemade masks: would they protect in an influenza pandemic?

"Our findings suggest that a homemade mask should only be considered as a last resort to prevent droplet transmission from infected individuals" so why have the government suggested you make your own when they are not effective?

Study article: <a href="https://pubmed.ncbi,nlm,nih.gov/24229526/">https://pubmed.ncbi,nlm,nih.gov/24229526/</a>

### 16. Using half-facepleQe respirators for H1N1

"Increasing the filtration level of a partide respirator does not increase the respirator's ability to reduce a user's exposure to contaminants"

https://i:>ubmed.ncbi.nlm.oih.gov/19927872/

### 17. Why Masks Don't Work Against COVID-19

The site is full of studies proving masks dont work for coronavirus or the flu.

Artid e:

bttps://www.citizensforfreespeecb.org/why masks don t work against covid 19?fbdid=lwAROQyiwtGBObOg aMij03CjOf.gTcm\_gm5jbXcMk0\_8GcH3Kur-bwibOo8rf8

#### 18. Masks Don't Work: A Review of Science Relevant to COVID-19 Social Pollcy

This is full of studies proving mask protection is negligible for coronavirus, flu etc

Article; <a href="htt12s://www.rc:r9der.c;om/commentary/mask-dont-work-covid-a-review-of-science-relevant-to-covide-19-social-policy?fbdid=lwAROOvjwt6BObOqaMij03CjOf.qTcm">htt12s://www.rc:r9der.c;om/commentary/mask-dont-work-covid-a-review-of-science-relevant-to-covide-19-social-policy?fbdid=lwAROOvjwt6BObOqaMij03CjOf.qTcm</a> qm5jhXcMk08GcH3Kur-bwibOo8rf8

#### 19. Face masks to prevent transmission af Influenza. virus: a systematic review

There is fewer data to support the use of face masks or respirators to prevent becoming infected. Study article: https://pubmed.ncbj.nlm.nih.gov/20092668/

### 20,"Exercise with facemaski Are we handling a dc,vll's sword?" - A physiological hypothesis

No evidence to suggest that wearing a mask during exercise offers any benefit from the droplet transfer from the virus.

'Exercising with facemasks may reduce available Oxygen and increase air trapping preventing substantial carbon dioxide exchange. The hypercapnic hypoxia may potentially increase acidic environment, cardi11to verloa,d anaerobic metabolism and renal overload, which may substantially aggravate the underlying pathology of established chronic diseases"

Study article: <a href="https://pubmed.ncbLnlm.nih.gov/32590322/">https://pubmed.ncbLnlm.nih.gov/32590322/</a>

### 21. Use of face masks by non«rubbed operating room staff: a randomized ex>ntrollodtrial

Surgical site infection rates did not increase when non-scrubbed personnel did not wear face masks 2010 Study article: <a href="https://pubmed.ncbi.nlm.nih.9ov/20575920/">bttps://pubmed.ncbi.nlm.nih.9ov/20575920/</a>

### 2Z.Surgical face mask8 in modem operating rooms - a costly and unnecHsary ritual?

When the wearing of face masks by non-scrubbed staff working in an operating room with forced vent1lato1n seems to be unnecessary.

Study article: https://pubmed.ncbi.nlm.nih.gov/1680906/

### 23. MMks: a ward InwistIgation and review of the literature

Wearing multi layer operating room masks for **every** visit had no effect on nose and throat carriage rates. Study article: <a href="https://pubmed.ncbi.nlm.nih.gov/2873176/">https://pubmed.ncbi.nlm.nih.gov/2873176/</a>

### 24. Aerosol penetration, and leakage characteristics of masks used in the health care industry

The protection provided by surgical masks may be insufficient in environments containing potentially hazardous submirconometer-sized aerosols.

"Condusion: We conclude that the protection provided by surgical masks may be insufficient in environments containing potentially hazardous submicrometer-sized aerosols"

Study article: https://pubmed.ncbi.aim.oib.gov/8239046/

## 25. Masks for prevention of viral respiratory Infections among health care workers and the public: PEER umbrella systematic review

Meta analysis review that says there is limited evidence to suggest that the use of masks may reduce the risk of spreading viral respiratory infections.

Study article: <a href="https://pubmed.ncbi.n!m.nih.gov/32675098/">bttps://pubmed.ncbi.n!m.nih.gov/32675098/</a>

# 26. Modeling of the Transmlulon of Coronaviruses, Meules Virus, Influenza Virus, *Mycob,,ct«'lum tuberculos/*\$, and *ltJg/ontJ/la pn«IIK)phlla* in **Dental Clinics**

Evidence to suggest that transmission probability is strongly driven by indoor air quality, followed by patient effectiveness and the least by respiratory protection via mask use.

So this could explain second waves" and has nothing to do with hand shaking, or not wearing a mask. Study article: <a href="https://pubmed.ncbl.nlm.nih.gov/32614681/">https://pubmed.ncbl.nlm.nih.gov/32614681/</a>

## 27. Nonpharmaceutical Measures for Pandemic Influenza In Nonhealthcare Settings-Personal Protective and Environmental Meuures

The use of face masks, either by infected or non infected peresons, does not have a significant effect on influenza transmission.

SO MASKS DON'T PROTECT YOU FROM ME, AND VICE VERSA.

Study article: <a href="https://pubmed.ncbi.nlm,nih.gov/32027586/">https://pubmed.ncbi.nlm,nih.gov/32027586/</a>

# 28. Effectiveness of personal protective measures in reducing pandemic influenza transmission: A systematic review and meta-analysis

Meta analyses suggest that regular hand hygiene provided a significant protective effect over face masks and their insignificant protection.

Study article: <a href="https://pubmed.ncbLnlm.nih.gov/28487207/">https://pubmed.ncbLnlm.nih.gov/28487207/</a>

## 29. Effed:Iveneu of N95 respirators versus surgical masks against Influenn: A systematic NIYlewand meta analysis

Use of n95 respirators compared to surgical masks is not associated with a lower risk of laboratory confirmed influenza.

Study article: https://pubmed.ncbl.nlm.nih.9ov/32167245/

#### 30. Adolescents' face mask usage and contact transmilation in novel Coronavirus

Face masks surfaces can become contamination sources. People are storing them in their pockets, bags, putting them on tables, people are reusing them etc.. This is why this study is relevant:

### 31. Visualizing the effectiveness of face masks in obstructing rospiratory jets

Loosely folded face masks and "bandana style" face coverings provide minimum stopping capability for the smallest aerosolized droplets.

This applies to anyone who folds or shoves a mask into their pockets or bad. It also applies to cloth and homemade cloth masks:

Study article: https://pubmed.ncbLnlm.nih.gov/32624649 /

## 32. UN of surgical fa\(\sigma\) ie masks to reduce the Inddon\(\sigma\) ie of the wmmon wld among health \(\sigma\) are workers in Japan: a randomized controlled trial

Face mask use In healthcare workers has not been demonstrated to provide benefit in terms of colds symptoms or getting colds.

Study article: <a href="https://pubmed.ncbi.nlm.nih.gov/19216002/">https://pubmed.ncbi.nlm.nih.gov/19216002/</a>

## aaAcluster randomised trial of cloth masks compared with medical masks In heal1ncareworkers

Penetration of cloth masks by influenza particles was almost 97 percent and medical masks 44 percent. so cloth masks are essentially useless. and "medical grade" masks don't provide adequate protection.

Study article: <a href="https://pubmcd.ncbi.nlm.njh.gov/2590">https://pubmcd.ncbi.nlm.njh.gov/2590</a> 3751 /

# 34. Simple respiratory protection-evaluation of the filtration performance of cloth masksand common fabric materials against $20-1000\,\mathrm{nm}$ size particles

Cloth masks and other fabric materials tested in the study had 40-90 percent instantaneous penetration levels against polydisperse NaCl aerosols.

uResults obtained in the study show that common fabric materials may provide marginal protection against nanoparticles, including those in the size ranges of virus-containing particles in exhaled breath"

Study article: <a href="https://pubmed.ncbi.nlm">bttps://pubmed.ncbi.nlm</a> .nih.goy/20 58 4862 /

## 95. Respiratory performance offered by N95 respirators and surgical masks: human subject evaluation with NaCl aero.sol representing bacterial and viral particle size range

"The study indicates that N95 filtering facepiece respirators may not achieve the expected protection level against bacteria and viruses"

Study article: https://pubmed.ncbi.nlm.nib.gov/18326870/

## 36.0 o N95 respirators provide 95% protection level against airborne viruses, and how adequate are surgical masks?

The n95 filtering respirators may not provide expected protection level against small virons Study article: <a href="https://pubmed.ncbi.nlm.nlh.gov/16490606/">https://pubmed.ncbi.nlm.nlh.gov/16490606/</a>

#### 37. Do Surgical Mules Stop the Coronavirus?

Study artide: <a href="https://slate.com/news-and-politics/2020/01/coronavirus-surgical-masks-china.html">https://slate.com/news-and-politics/2020/01/coronavirus-surgical-masks-china.html</a>

## 38. Effectiveness of personal protective measures in reducing pandemic influenza transmission: A systematic review and meta-enalysis

This study states that an N95, depending on the brand, can range from 0.1-0.3 microns. however, most people cannot buy an N95 with a micron smaller than 0.3 micron because they are expensive and not readily available on the public market.

"N95 respirators made by different companies were found to have different filtration efficiencies for the most penetrating particle size (0.1 to 0.3 micron)"

- " Above the most penetrating particle size the filtration efficiency increases with size; it reaches approximately 99.5% or higher at about 0.75 micron"
- " Meta-analyses suggest that regular hand hygiene provided a significant protective effect (OR=0.62; 95% CI 0.52-0.73; 12=0%), and facemask use provided a non-significant prote ive effect (OR=0.53; 95% CI 0.16-1.71; 12=48%) against 20.09 pandemic influenza infection" Study afficies pros://pubmed.ncbi.nm.nlm.dov/28487207/

## 39. The state of N95 respirators versus surgical magainst Influenza: A systematic review and meta-

"The use of N95 respirators comp d with surgical mas is not associated with a lower risk of laboratory-confirmed influenza. It suggests that N 5 respirators shoul not be recommended for the general public, neither non high-risk medical staff who are not close contact who higher influenzal patients or suspected patients."

N95 masks did show a positive effect for BACTERIA but not viruses.

Study article: <a href="https://pubmed.ncbi.nlm.nih.gov/32">bttps://pubmed.ncbi.nlm.nih.gov/32</a> 167245/

#### 40. Adoleaamts' face muk usage and contact tranemt..ion in novel CoronavlNI

This study used dye to show if masks were contaminated. "As a result. masks suce become contamination source. In the contact experiment, ten adults were requested to donand doff a surgical mask while doing a word processing task. The extended contamination areas were recorded and identified by image analysis."

Study article: https://pubmed.ncbLn!m.nih.goy/3258 2579 /

# ..ii. U.. of ourgical f..ce mub to reduce the iftdd@'ea of the mmmon cold among health caewolesin Japan: a randomized QOntrolled trial

"Of the S symptoms recorded daily, subjects in the mask group were significantly more likely to **experience** headache during the study period"

"Facemask use in health care workers has not been demonstrated to provide benefit in terms of cold symptoms or getting colds"

Study article: <a href="https://pubmed.ncbi.nlm.nih.gov/19216002/">https://pubmed.ncbi.nlm.nih.gov/19216002/</a>

## 42. Effectiveness of Adding a Mask Recommendation to Other Public Health Measures to Prevent SAR> CoV-2 Infection In Danish Muk Wearers: A Randomized Controlled TrtaJ

" The recommendation to wear surgical masks to supplement other public health measures did not reduce the SARS-CoV-2 infection rate among wearers by more than 50 percent in a community with modest infection rates. some degree of social distancing, and uncommon general mask use"

Study article: bttps://pubmed.ncbi,nlm,nih.goy/33205991/\_

#### 43. A duster randomised trial of cloth masks compared with medical muks in healthcare workers

"An analysis by mask use showed  $ILi(RR=6.64, 95 \, percent \, Cl \, 1.4 \, 5 \, to \, 28.65)$  and laboratory-confirmed virus (RR=1.72, 95 percent Cl 1.01 to 2.94) were significantly higher in the cloth masks group compared with the medical masks group. Penetration of cloth masks by particles was almost 97 percent and medical masks 44 percent"

Study article: <a href="https://pubmed.ncbi.nlm.nih.gov/25903751/">https://pubmed.ncbi.nlm.nih.gov/25903751/</a>

# 44. Respiratory perf0rmance offered by N95 rmpirators and surgical masks: human subject evaluation with NaCl aerosol representing bacterial and viral pwtk:lelize range

"The study indicates that N95 filtering facepiece respirators may not achieve the expected protection level against bacteria and viruses. An exhalation valve on the N95 respirator does not affect the respiratory protection" Study article: <a href="https://pubmed.ncbi.nlm.nih.gov/18326870/">https://pubmed.ncbi.nlm.nih.gov/18326870/</a>

### -4S.Performana, of N95 rcapirators: filtration efficiency for airborne microbiaJ and inert partide1

Coronavirus is 0.125 micron, as you can read in this study, it states that most N95 masks can only filter particles as small as 0.75 microns. This is too big to trap this virus, that is a fact.

And even with an efficiency of 95 percent (depending on brand, so filtration may be lower) IF the virus can be trapped... it's still missing 5 percent and maybe more based on an N95 that has 0.1 microns.

Study article: <a href="http://pubmcd.ncbi.nlm.nih.510v/9487666/">bttp://pubmcd.ncbi.nlm.nih.510v/9487666/</a>

CORONAVIRUSES ARE 0.125 MICRON. SO THE BEST N95 ON THE MARKET WOULD DO NOTHING.

#### 46. A Novel Coronavirus from Patients with Pneumonia In Oline, 2019

a chinese study that proves that an airborne coronavirus particle (0.125 micron) can pass directly through an n95 mask

Study article: <a href="https://pubmed.ncbi.nlm.nib.Qov/319">bttps://pubmed.ncbi.nlm.nib.Qov/319</a> 789 45/

#### 47. Airborne coronavirus partide (<0.125 micron) will pass directly through a N95 face mask.

Study article: https://www.greenmedinfo.com/article/airborne-coronavirus--partide

SIZE OF THE CORONAVIRUS.

Size can vary but all are smaller than 0.3 micron.

"Human coronaviruses measure between 0.1 and 0.2 microns, which is one to two times below the cutoff" This "cut off' isreferring to the size an N95 mask can trap. Most of us, are not using MEDICAL or regular N95s.