Mask Studies

+**STUDY:** "Moisture retention, reuse of cloth masks and poor filtration may result in **increased risk of infection. Penetration of cloth masks by particles was almost 97%** and medical masks 44%." (LINK)

+ **REVIEW:** We objectified evaluation evidenced changes in respiratory physiology of mask wearers with significant correlation of **O_2 drop and fatigue** ($p < 0.05$), a clustered co-occurrence of **respiratory impairment and O_2 drop** (67%), N95 mask and **CO_2 rise** (82%), N95 mask and **O_2 drop** (72%), N95 mask and **headache** (60%), **respiratory impairment and temperature rise** (88%), but also **temperature rise and moisture** (100%) **under the masks**. **Extended mask-wearing by the general population could lead to relevant effects and consequences in many medical fields**. (LINK)

+RANDOMIZED CONTROL TRIALS: we identified 10 RCTs that reported estimates of the effectiveness of face masks in reducing laboratory-confirmed influenza virus infections in the community from literature published during 1946–July 27, 2018. In pooled analysis, **we found no significant reduction in influenza transmission with the use of face masks (LINK)**

+**STUDY:** Carbon dioxide of inhaled air of children wearing cloth and surgical masks was (on average) anywhere from **7.6-34 times higher than of normal ambient air** (LINK)

+**STUDY**: "It has never been shown that wearing surgical face masks decreases postoperative wound infections. On the contrary, a **50% decrease has been reported after omitting face masks(LINK)**

+**STUDY:** "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 sub micrometer-size aerosols containing pathogens** to which these health care workers are potentially exposed." (LINK)

+OSHA: "Cloth masks: Will **not** protect the wearer against airborne transmissible infectious agents due to loose fit and lack of seal or inadequate filtration.

Surgical Masks: Will **not** protect the wearer against airborne transmissible infectious agents due to loose fit and lack of seal or inadequate filtration." (LINK)

+**Dr Anthony Fauci:,** "In early March, Dr. Anthony Fauci, a leading voice on the White House Coronavirus Task Force, told "60 Minutes" face masks were not necessary for the general population amid the novel coronavirus outbreak, noting that while masks might make people "feel a little bit better," they don't provide the protection folks believe they do and might create "unintended consequences." (LINK)

+**Surgeon General Jerome Adams** (Feb29,2020): "Seriously, people- STOP BUYING MASKS! They are NOT effective in preventing general public from catching #Coronavirus, but if healthcare providers can't get them to care for sick patients, it puts them and our communities at risk!" (LINK)

+STUDY: "If protection against airborne organisms is required, an N95 respirator or better should be used, as currently recommended by the CDC and WHO guidelines for SARS prevention." (Not surgical/ cloth masks) (LINK)

+WHO: (for those without respiratory symptoms): a medical mask is not required, as no evidence is available on its usefulness to protect non-sick persons. (LINK)

+3M Corp (Mask manufacturer) "surgical/procedure masks **cannot provide certified respiratory protection** unless they are also designed, tested, and government-certified as a respirator. If a wearer wants to reduce inhalation of smaller, inhalable particles (**those smaller than 100 microns), they need to obtain and properly use a government-certified respirator,** such as a NIOSH-approved N95 filtering facepiece particulate respirator." (LINK)

+**STUDY:** Coronavirus particles are **under 4 microns** in size (LINK)

+**STUDY:** Masks lower oxygen levels: "Considering our findings, **pulse rates of the surgeon's increase and SpO2 (oxygen saturation) decrease** after the first hour. This early change in SpO2 may be either due to the facial mask or the operational stress. **Since a very small decrease in saturation at this level, reflects a large decrease in PaO2 (arterial oxygen),** our findings may have a clinical value for the health workers and the surgeons." (LINK)

+**STUDY:** Masks don't work if worn incorrectly: "the value of masks to protect other members of the public is diminished if they are incorrectly worn. As anesthetists we have seen other health professionals in our hospital wear masks in a variety of ways—below the nose, on the chin—because of the discomfort they cause.**3** Why should we expect the public to exhibit greater care in their mask wearing to ensure that the benefits outweigh the risks?" (LINK)

+British Medical Journal: Harmful Effects of Masks: "Before implementing clinical and public health interventions, one must actively hypothesize and describe potential side effects and only then decide whether they are worth being quantified on not.
Most scientific articles and guidelines in the context of the covid-19 pandemic highlight two potential side effects of wearing surgical face masks in the public, but we believe that there are other ones that are worth considering before any global public health policy is implemented involving billions of people.

The two potential side effects that have already been acknowledged are:

(1) Wearing a face mask may give a false sense of security and make people adopt a reduction in compliance with other infection control measures, including social distancing and hands washing.[3]

(2) Inappropriate use of face mask: people must not touch their masks, must change their single-use masks frequently or wash them regularly, dispose them correctly and adopt other management measures, otherwise **their risks and those of others may increase.[**3,4]

Other potential side effects that we must consider are:

(3) The quality and the volume of speech between two people wearing masks is considerably compromised and they may unconsciously come closer. While one may be trained to counteract side effect n.1, this side effect may be more difficult to tackle.

(4) Wearing a face mask makes the exhaled air go into the eyes. This generates an uncomfortable feeling and an impulse to touch your eyes. If your hands are contaminated, **you are infecting yourself.**

(5) **Face masks make breathing more difficult**. For people with COPD, face masks are in fact intolerable to wear as they worsen their breathlessness.[5] Moreover, a fraction of carbon dioxide previously exhaled is inhaled at each respiratory cycle. Those two phenomena increase breathing frequency and deepness, and hence they increase the amount of inhaled and exhaled air. **This may worsen the burden of covid-19 if infected people wearing masks spread more contaminated air. This may also worsen the clinical condition of infected people if the enhanced breathing pushes the viral load down into their lungs.**

(5B) The effects described at point 5 are amplified **if face masks are heavily contaminated** (see point 2)

(6) While impeding person-to-person transmission is key to limiting the outbreak, so far little importance has been given to the events taking place after a transmission has happened, when innate immunity plays a crucial role. The main purpose of the innate immune response is to immediately prevent the spread and movement of foreign pathogens throughout the body.[6] The innate immunity's efficacy is highly dependent on the viral load. **If face masks determine a humid habitat where the SARS-CoV-2 can remain active due to the water vapour continuously provided by breathing and captured by the mask fabric, they determine an increase in viral load and therefore they can cause a defeat of the innate immunity and an increase in infections**. This phenomenon may also interact with and enhance previous points.

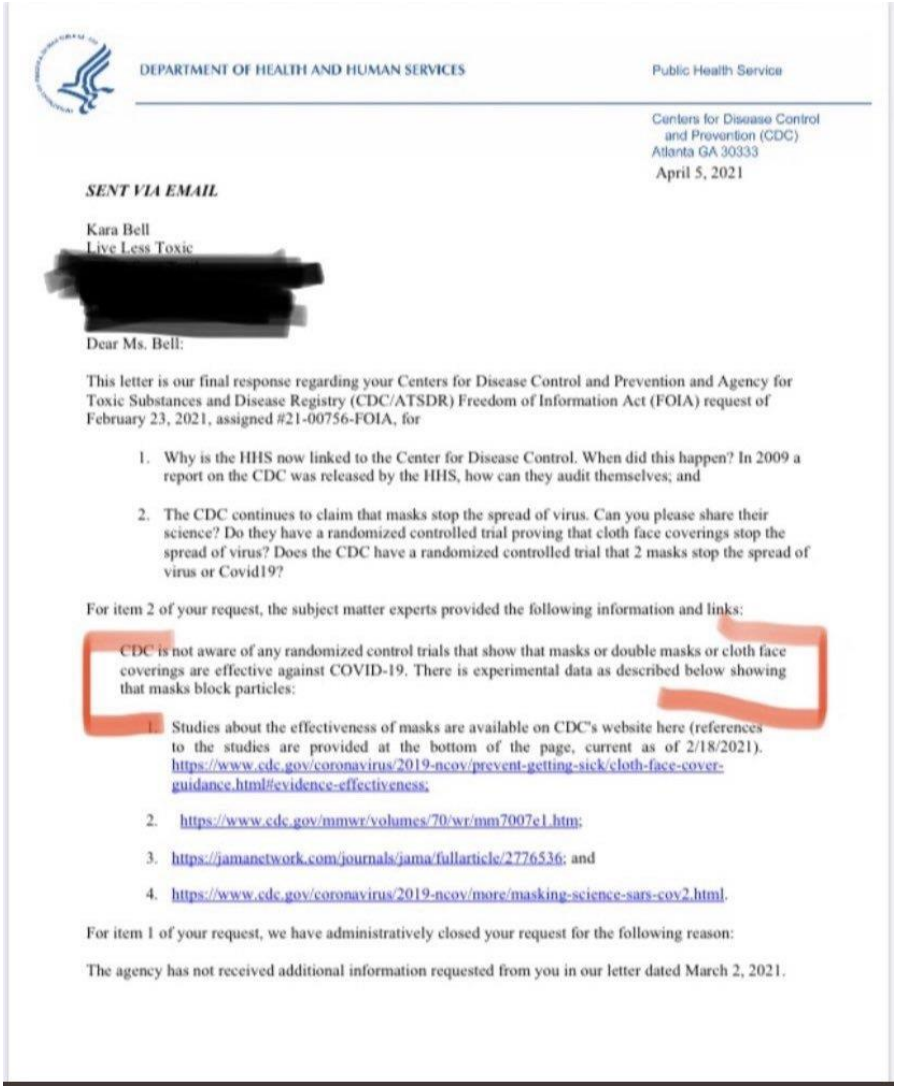
In conclusion, as opposed to Greenhalgh et al., we believe that the context of the current covid-19 pandemic is very different from that of the "parachutes for jumping out of aeroplanes",[7] in which the dynamics of harm and prevention are easy to define and even to quantify without the need of research studies. **It is necessary to quantify the complex interactions that may well be operating between positive and negative effects of wearing surgical masks at population level. It is not time to act without evidence.** (LINK)

+STUDY: Conclusion: We conclude that the protection provided by surgical masks may be insufficient in environments containing potentially hazardous submicrometer-sized aerosols.
(LINK)

+STUDY: Conclusion: The N95 filtering face piece respirators may not provide the expected protection level against small virions. Some surgical masks may let a significant fraction of airborne viruses penetrate through their filters, providing very low protection against aerosolized infectious agents in the size range of 10 to 80 nm. It should be noted that the surgical masks are primarily designed to protect the environment from the wearer, whereas the respirators are supposed to protect the wearer from the environment.
(LINK)

MISCELLANEOUS

Freedom of Information Act (Email from CDC)



DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service

Centers for Disease Control and Prevention (CDC)
Atlanta GA 30333

April 5, 2021

SENT VIA EMAIL

Kara Bell
Live Less Toxic
[redacted]

Dear Ms. Bell:

This letter is our final response regarding your Centers for Disease Control and Prevention and Agency for Toxic Substances and Disease Registry (CDC/ATSDR) Freedom of Information Act (FOIA) request of February 23, 2021, assigned #21-00756-FOIA, for

1. Why is the HHS now linked to the Center for Disease Control. When did this happen? In 2009 a report on the CDC was released by the HHS, how can they audit themselves; and

2. The CDC continues to claim that masks stop the spread of virus. Can you please share their science? Do they have a randomized controlled trial proving that cloth face coverings stop the spread of virus? Does the CDC have a randomized controlled trial that 2 masks stop the spread of virus or Covid19?

For item 2 of your request, the subject matter experts provided the following information and links:

CDC is not aware of any randomized control trials that show that masks or double masks or cloth face coverings are effective against COVID-19. There is experimental data as described below showing that masks block particles:

1. Studies about the effectiveness of masks are available on CDC's website here (references to the studies are provided at the bottom of the page, current as of 2/18/2021). https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-cover-guidance.html#evidence-effectiveness;

2. https://www.cdc.gov/mmwr/volumes/70/wr/mm7007e1.htm;

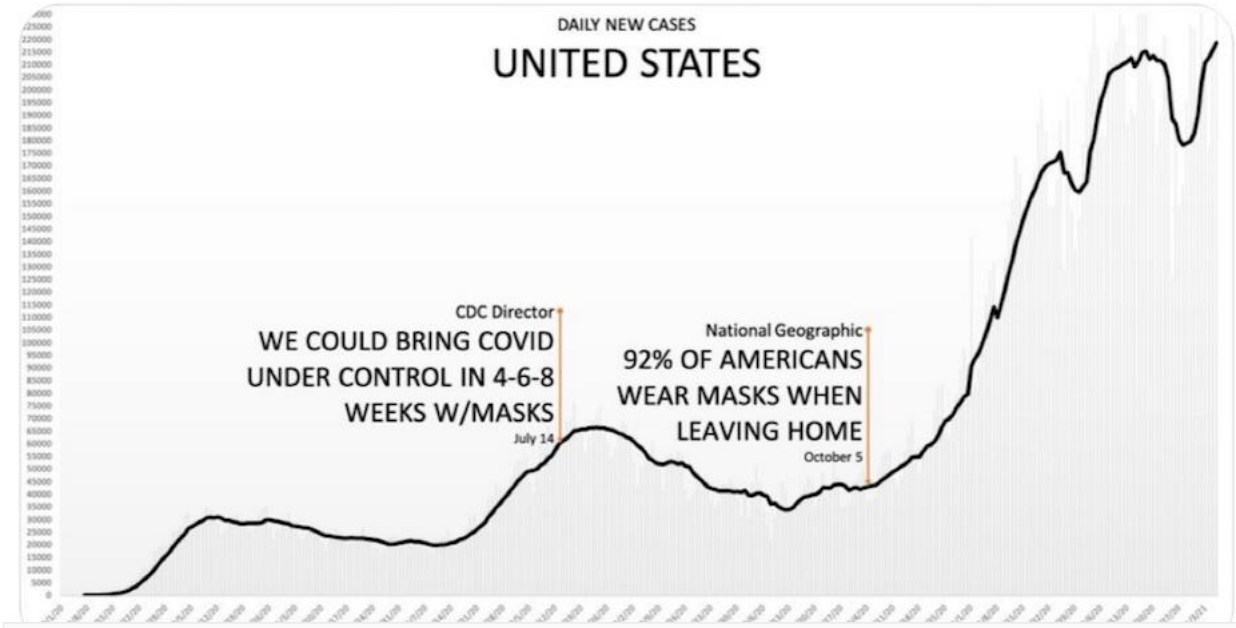
3. https://jamanetwork.com/journals/jama/fullarticle/2776536; and

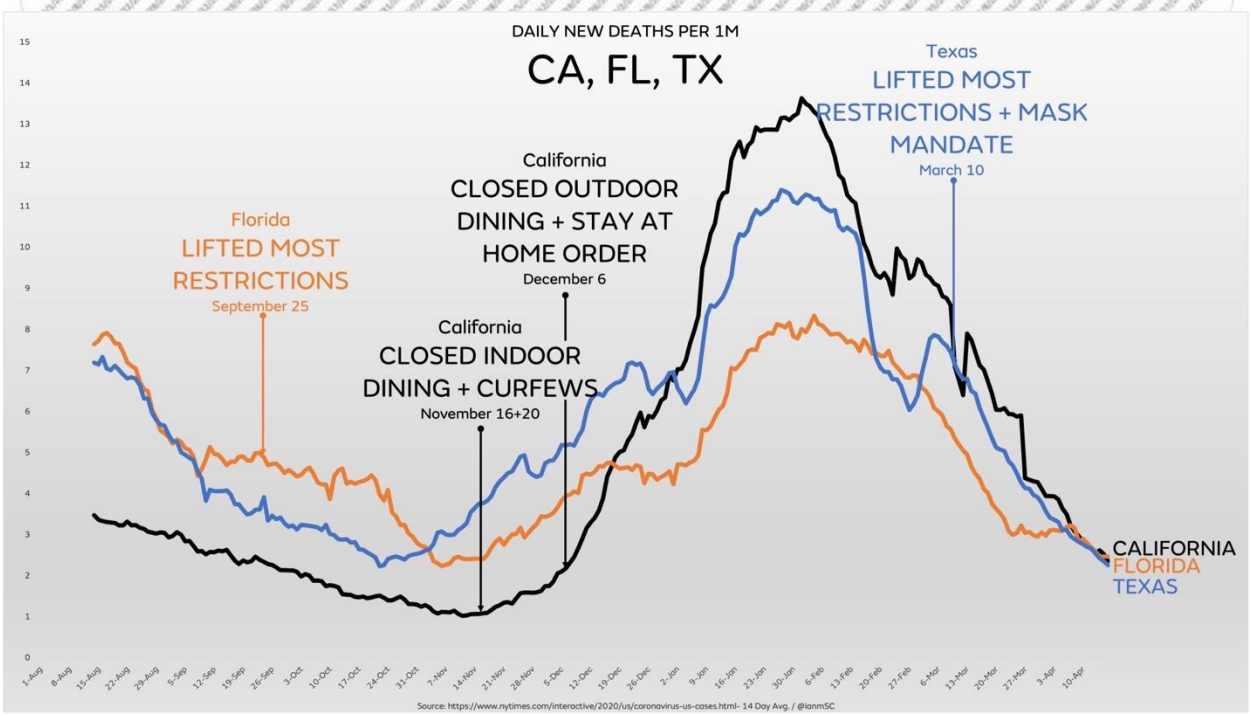
4. https://www.cdc.gov/coronavirus/2019-ncov/more/masking-science-sars-cov2.html.

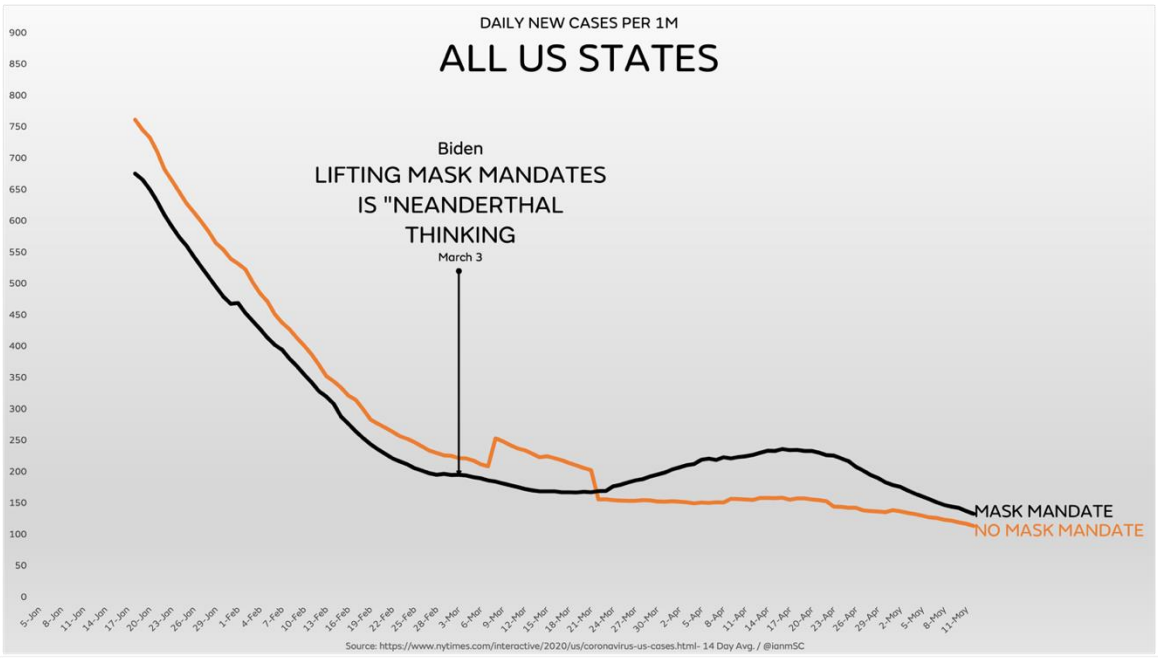
For item 1 of your request, we have administratively closed your request for the following reason:

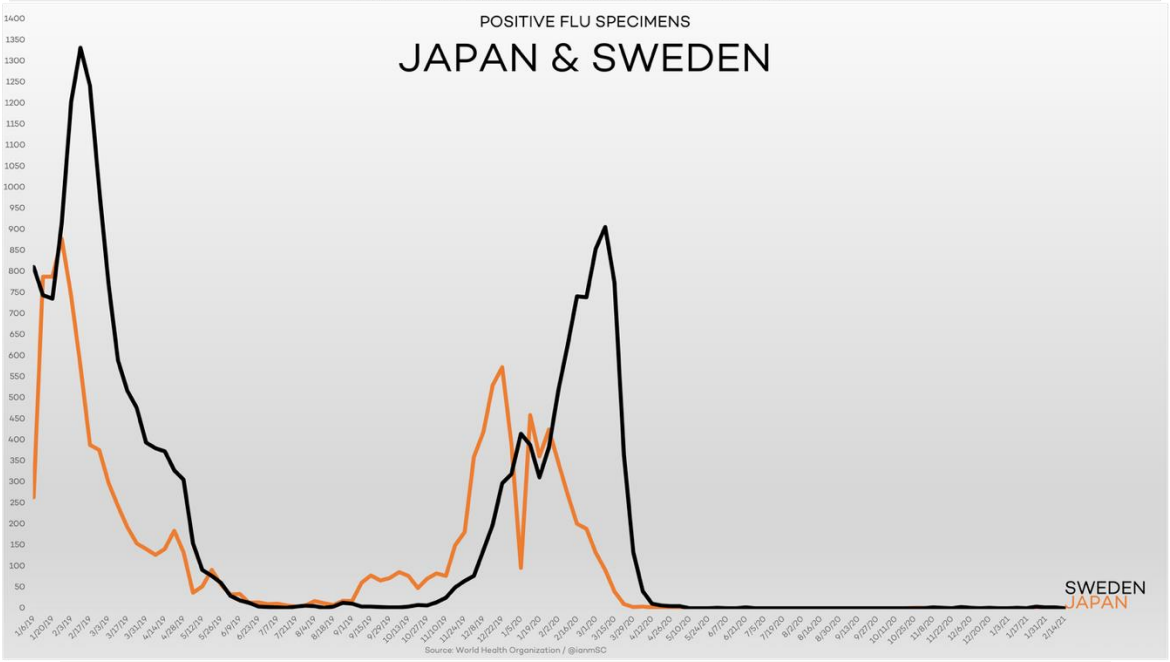
The agency has not received additional information requested from you in our letter dated March 2, 2021.

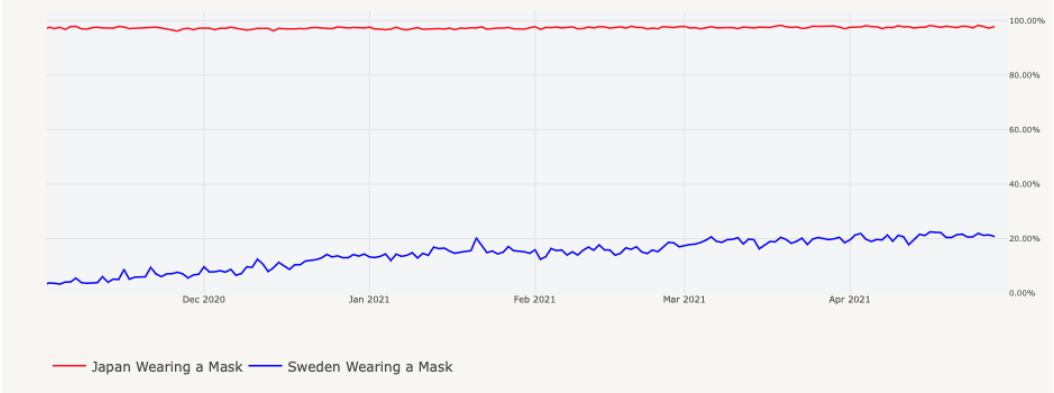
Sources for following graphs:
@ianmsc- twitter
https://ianmsc.substack.com/
Sources also on bottom of graphs






DAILY NEW CASES PER 1M
ALL US STATES
Biden
LIFTING MASK MANDATES
IS "NEANDERTHAL
THINKING
March 3
MASK MANDATE
NO MASK MANDATE
Source: https://www.nytimes.com/interactive/2020/us/coronavirus-us-cases.html- 14 Day Avg. / @ianmSC


POSITIVE FLU SPECIMENS
JAPAN & SWEDEN
SWEDEN
JAPAN
Source: World Health Organization / @ianmSC


100.00%
80.00%
60.00%
40.00%
20.00%
0.00%
Dec 2020
Jan 2021
Feb 2021
Mar 2021
Apr 2021
Japan Wearing a Mask
Sweden Wearing a Mask