

#### PANDA KNOWLEDGE FACTORY NPC

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# PANDA COMMENTS ON THE PROPOSED AMENDMENTS TO THE DISASTER MANAGEMENT ACT REGULATIONS (the "Proposed Regulations")

## 1 INTRODUCTION

- PANDA KNOWLEDGE FACTORY NPC ("PANDA") is incorporated as a non-profit company. PANDA is operated by a multidisciplinary group of various experts, seeking to inform appropriate policies surrounding the COVID-19 outbreak (the "Outbreak"), with scientific data and analytics, both nationally and internationally. PANDA is an active, non-partisan, non-governmental organisation, which seeks to inform policy responses to the Outbreak through the application of scientific data and analytics. It is recognised internationally as one of the preeminent independent sources of analysis in relation to the Outbreak.
- PANDA, as an organisation, is committed to protecting the public from misinformed policies, regulations and laws which are implemented against the Outbreak, and which policies, regulations and laws are premised on incorrect and adverse scientific data and information, or simply put no scientific support at all. PANDA aims at ensuring that the measures taken to combat, eradicate or lessen the effects of the Outbreak, do not cause more harm than good. PANDA is further committed to taking appropriate action when individuals' rights are violated by irrational and unscientific policies, regulations and laws.
- 1.3 PANDA is opposed to the continuation of the state of disaster and believes that it should be ended together with all regulations thereunder. No regulations are required as objectively there is no disaster and were a disaster to arise, another disaster could be declared. We are therefore opposed to the Proposed Regulations but in favour of the immediate ending of the state of disaster.

OPEN SCIENCE, HUMAN AGENCY.

## 2 **LEGAL BASIS**

- 2.1 The State of Disaster was declared in terms of Government Notice No. 313 of 15 March 2020 (the "Notice"). The Notice declares a state of disaster in terms of Section 27(1) of the Disaster Management Act, 200 (the "DMA") and references the power of the Minister of Cooperative Governance and Traditional Affairs (the "Minister") to make regulations under Section 27(2) of the DMA.
- 2.2 Section 27(1) of the DMA allows the Minister to declare a state of disaster only where:
- 2.2.1 A national disaster has occurred. The term "disaster" is defined in the DMA as an occurrence that causes or threatens to cause death, injury or disease of a magnitude that exceeds the ability of those affected by the disaster to cope with its effects using only their own resources.
- 2.2.2 Existing legislation and contingency arrangements do not adequately provide for the national executive to effectively deal with the disaster or other special circumstances warrant the declaration of a disaster.
- 2.3 Section 27(2) of the DMA provides that the Minister may make regulations or issue directions or authorise the issue of directions, "If a national state of disaster has been declared in terms of subsection (1)."
- Section 27(2)(m) permits the Minister to make regulations relating to the facilitation of "post-disaster recovery and rehabilitation". This term is defined as efforts, including development, aimed at creating a situation where normality in conditions caused by the disaster is restored, the effects of the disaster are mitigated or the circumstances are created that will reduce the risk of a similar disaster occurring." The DMA deals with post-disaster recovery and rehabilitation exclusively in the context of financial matters (See Chapter 6 and Section 7(2)(k)). The purpose of post-disaster recovery and rehabilitation is to provide funding to facilitate rehabilitation including "grants" and "payments." These provisions of the DMA are plainly aimed at natural disasters and funding the repair of damage caused by such natural disasters.
- 2.5 Section 27(3) of the DMA provides that the power to make regulations may be exercised only to the extent that this is necessary for the purpose of assisting and protecting the public, providing relief to the public, protecting

property, preventing or combating disruption or dealing with the destructive and other effects of the disaster.

- 2.6 Section 27(4) of the DMA provides that a national state of disaster may be terminated by the Minister by notice.
- 2.7 Government itself has argued that the state of disaster can only be terminated when permanent legislation is in place, thereby acknowledging what is obvious that the regulations made by the Minister under Section 27(2) of the DMA (the "DMA Regulations") and all directions made under the DMA Regulations (the "Directions") expire when the state of disaster ends. The only exception would be regulations made by the Minister relating to grants and other payments to victims of the disaster.
- 2.8 Proposed Regulation 5 states that certain of the regulations under the DMA (the "DMA Regulations") will continue to operate and be of force and effect until 30 days after the national state of disaster ends. Proposed Regulation 5 is patently *ultra vires* in relation to all regulations other than those dealing with funding and payments. All of the other DMA Regulations and Directions will expire immediately the state of disaster is terminated.
- There is patently no occurrence in South Africa as at 30 March 2022 that meets the definition of a "disaster" under the DMA. The Minister's renewals of the state of disaster have been *ultra vires*, irrational and invalid for many months if not since March 2020. The Minister has in fact acknowledged that there is no disaster by failing to reference any of the requirements for the existence of a "disaster" prescribed in the DMA in extensions of the state of disaster for some time. The Minister must end the state of disaster and when she does, the Proposed Regulations relating to masking, vaccination and social distancing will cease to have any force or effect.
- 2.10 Should circumstances change such that a new disaster occurs, the Minister can declare another state of disaster in terms of Section 27(1) of the DMA and reenact all of the DMA Regulations that may be required to control the disaster. There is therefore no merit to the argument that the state of disaster must persist until permanent changes have been made to the legislation nor that the termination of the state of the disaster cannot occur without Proposed Regulation 5 applying.
- 2.11 No new legislation is in fact required. The threat that society faces from COVID-19 is in line with other threats that society has faced for hundreds of years.

2.12 Government has had more than two years to present additional legislation to Parliament for approval and the supposed urgency now referenced is self-imposed and self-created. The 48-hour comment period is evidence of the fact that the Government does not take proper account of the views of interested and affected parties.

## 3 PROPOSED REGULATION 67 - MASKS

- 3.1 The Proposed Regulations require masking indoors. Masks have been shown to be ineffective against the spread of SARS-CoV-2. A list of studies in this regard is updated at this <u>website</u>. We have selected just some of the studies below:
- 3.1.1 "Infection with SARS-CoV-2 occurred in 42 participants recommended masks (1.8%) and 53 control participants (2.1%). The between-group difference was -0.3 percentage point (95% CI, -1.2 to 0.4 percentage point; P = 0.38) (odds ratio, 0.82 [CI, 0.54 to 1.23]; P = 0.33). Multiple imputation accounting for loss to follow-up yielded similar results...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% in a community with modest infection rates, some degree of social distancing, and uncommon general mask use." Effectiveness of Adding a Mask Recommendation to Other Public Health Measures to Prevent SARS-CoV-2 Infection in Danish Mask Wearers, Bundgaard, 2021
- "There is low certainty evidence from nine trials (3507 participants) that wearing a mask may make little or no difference to the outcome of influenza-like illness (ILI) compared to not wearing a mask (risk ratio (RR) 0.99, 95% confidence interval (CI) 0.82 to 1.18. There is moderate certainty evidence that wearing a mask probably makes little or no difference to the outcome of laboratory-confirmed influenza compared to not wearing a mask (RR 0.91, 95% CI 0.66 to 1.26; 6 trials; 3005 participants)...the pooled results of randomised trials did not show a clear reduction in respiratory viral infection with the use of medical/surgical masks during seasonal influenza." Physical interventions to interrupt or reduce the spread of respiratory viruses, Jefferson, 2020
- 3.1.3 "Evidence from 14 randomized controlled trials of these measures did not support a substantial effect on transmission of laboratory-confirmed influenza...none of the household studies reported a significant reduction in secondary laboratory-confirmed influenza

virus infections in the face mask group...the overall reduction in ILI or laboratory-confirmed influenza cases in the face mask group was not significant in either studies." Nonpharmaceutical Measures for Pandemic Influenza in Nonhealthcare Settings—Personal Protective and Environmental Measures, Xiao et al., 2020. [Policy Review by Centers for Disease Control and Prevention]

- The use of masks and respirators to prevent transmission of influenza: a systematic review of thescientific evidence "None of the studies established a conclusive relationship between mask/respirator use and protection against influenza infection. Some evidence suggests that mask use is best undertaken as part of a package of personal protection, especially hand hygiene." The use of masks and respirators to prevent transmission of influenza: a systematic review of thescientific evidence. The use of masks and respirators to prevent transmission of influenza: a systematic review of the scientific evidence, Bin-Reza, 2012
- 3.1.5 "A cluster-randomized trial of community-level mask promotion in rural Bangladesh from November 2020 to April 2021 (N=600 villages, N=342,126 adults. Heneghan writes: "In a Bangladesh study, surgical masks reduced symptomatic COVID infections by between 0 and 22 percent, while the efficacy of cloth masks led to somewhere between an 11 percent increase to a 21 percent decrease. Hence, based on these randomized studies, adult masks appear to have either no or limited efficacy." The Impact of Community Masking on COVID-19: A Cluster-Randomized Trial in Bangladesh, Abaluck, 2021
- 3.1.6 "The available clinical evidence of facemask efficacy is of low quality and the best available clinical evidence has mostly failed to show efficacy, with fourteen of sixteen identified randomized controlled trials comparing face masks to no mask controls failing to find statistically significant benefit in the intent-to-treat populations. Of sixteen quantitative meta-analyses, eight were equivocal or critical as to whether evidence supports a public recommendation of masks, and the remaining eight supported a public mask intervention on limited evidence primarily on the basis of the precautionary principle."

  Evidence for Community Cloth Face Masking to Limit the Spread of SARS-CoV-2: A Critical Review, Liu et al, 2021
- 3.1.7 "[W]e continue to conclude that cloth masks and face coverings are likely to have limited impact on lowering COVID-19 transmission, because they have minimal ability to prevent the emission of small particles, offer limited personal protection with respect to small particle inhalation, and should not be recommended as a

replacement for physical distancing or reducing time in enclosed spaces with many potentially infectious people." <u>CIDRAP: Masks-for-all for COVID-19 not based on sound data</u>, Brosseau, 2020

- 3.1.8 "We conclude that the protection provided by surgical masks may be insufficient in environments containing potentially hazardous submicrometer-sized aerosols." <u>Aerosol penetration and leakage</u> characteristics of masks used in the health care industry, Weber, 1993
- 3.1.9 "A survey of peer-reviewed studies shows that universal mask wearing (as opposed to wearing masks in specific settings) does not decrease the transmission of respiratory viruses from people wearing masks to people who are not wearing masks." Does Universal Mask Wearing Decrease or Increase the Spread of COVID-19?, Watts up with that? 2020
- 3.1.10 "In fact, it is not unreasonable at this time to conclude that surgical and cloth masks, used as they currently are, have absolutely no impact on controlling the transmission of Covid-19 virus, and current evidence implies that face masks can be actually harmful." Masking: A Careful Review of the Evidence, Alexander, 2021
- 3.1.11 "Face masks in public was not associated with reduced incidence."

  Impact of non-pharmaceutical interventions against COVID-19 in

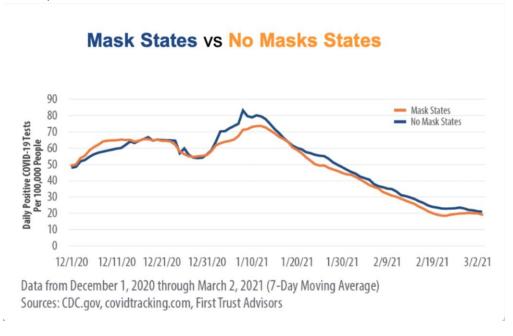
  Europe: a quasi-experimental study, Hunter, 2020
- 3.1.12 "As recently as 2010, the US National Academy of Sciences declared that, in the community setting, "face masks are not designed or certified to protect the wearer from exposure to respiratory hazards." A number of studies have shown the inefficacy of the surgical mask in household settings to prevent transmission of the influenza virus." The surgical mask is a bad fit for risk reduction, Neilson, 2016
- 3.1.13 "The existing scientific evidences challenge the safety and efficacy of wearing a facemask as preventive intervention for COVID-19. The data suggest that both medical and non-medical facemasks are ineffective to block human-to-human transmission of viral and infectious disease such SARS-CoV-2 and COVID-19, supporting against the usage of facemasks. Wearing facemasks has been demonstrated to have substantial adverse physiological and psychological effects. These include hypoxia, hypercapnia, shortness of breath, increased acidity and toxicity, activation of fear and stress response, rise in stress hormones, immunosuppression, fatigue, headaches, decline in

cognitive performance, predisposition for viral and infectious illnesses, chronic stress, anxiety and depression." <u>Facemasks in the COVID-19</u> era: A health hypothesis, Vainshelboim, 2021

- 3.1.14 "Most studies found little to no evidence for the effectiveness of face masks in the general population, neither as personal protective equipment nor as a source control." <u>Are Face Masks Effective? The Evidence</u>, Swiss Policy Research, 2021
- 3.1.15 "Mask mandates and use are not associated with slower state-level COVID-19 spread during COVID-19 growth surges." Mask mandate and use efficacy in state-level COVID-19 containment, Guerra, 2021
- 3.1.16 "The vast evidence shows that masks are ineffective." Are EUA Face Masks Effective in Slowing the Spread of a Viral Infection?. Dopp, 2021
- "A Centers for Disease Control report released in September shows that masks and face coverings are not effective in preventing the spread of COVID-19, even for those people who consistently wear them." CDC Study finds overwhelming majority of people getting coronavirus wore masks, Boyd, 2021
- 3.1.18 "The use of masks in public spaces is questionable simply because of the lack of scientific data. If one also considers the necessary precautions, masks must even be considered a risk of infection in public spaces according to the rules known from hospitals... If masks are worn by the population, the risk of infection is potentially increased, regardless of whether they are medical masks or whether they are so-called community masks designed in any way. If one considers the precautionary measures that the RKI as well as the international health authorities have pronounced, all authorities would even have to inform the population that masks should not be worn in public spaces at all. Because no matter whether it is a duty for all citizens or voluntarily borne by the citizens who want it for whatever reason, it remains a fact that masks can do more harm than good in public." Mouth-nose protection in public: No evidence of effectiveness, Kappstein, 2020
- 3.1.19 "Mask mandates and lockdowns have had no discernible impact."

  How face masks and lockdowns failed/the face mask folly in retrospect, Swiss Policy Research, 2021

- 3.2 Masks mandates have not reduced the impact of Covid-19 in South Africa or in any other country anywhere in the world.
- "Calculated total COVID-19 case growth and mask use for the continental United States with data from the Centers for Disease Control and Prevention and Institute for Health Metrics and Evaluation. We estimated post-mask mandate case growth in non-mandate states using median issuance dates of neighbouring states with mandates...did not observe association between mask mandates or use and reduced COVID-19 spread in US states." Mask mandate and use efficacy for COVID-19 containment in US States, Guerra and Guerra, 2021



"Masks can work well when they're fully sealed, properly fitted, changed often, and have a filter designed for virus-sized particles. This represents none of the common masks available on the consumer market, making universal masking much more of a confidence trick than a medical solution...Our universal use of unscientific face coverings is therefore closer to medieval superstition than it is to science, but many powerful institutions have too much political capital invested in the mask narrative at this point, so the dogma is perpetuated. The narrative says that if cases go down it's because masks succeeded. It says that if cases go up it's because masks succeeded in preventing more cases. The narrative simply assumes rather than proves that masks work, despite overwhelming scientific

3.2.2

evidence to the contrary." <u>These 12 Graphs Show Mask Mandates Do Nothing To Stop COVID</u>, Weiss, 2020

- "How long do our politicians get to ignore the results?... The results: When comparing states with mandates vs. those without, or periods of times within a state with a mandate vs. without, there is absolutely no evidence the mask mandate worked to slow the spread one iota. In total, in the states that had a mandate in effect, there were 9,605,256 confirmed COVID cases over 5,907 total days, an average of 27 cases per 100,000 per day. When states did not have a statewide order (which includes the states that never had them and the period of time masking states did not have the mandate in place) there were 5,781,716 cases over 5,772 total days, averaging 17 cases per 100,000 people per day." Horowitz: Comprehensive analysis of 50 states shows greater spread with mask mandates, Howorwitz, 2020
- 3.2.4 "The first ecological study of state mask mandates and use to include winter data: "Case growth was independent of mandates at low and high rates of community spread, and mask use did not predict case growth during the Summer or Fall-Winter waves." <a href="Phil Kerpin">Phil Kerpin</a>, tweet, 2021
- 3.2.5 "Infections have been driven primarily by seasonal and endemic factors, whereas mask mandates and lockdowns have had no discernible impact" How face masks and lockdowns failed, SPR, 2021
- 3.3 There is no scientific data supporting the idea that a homemade mask can contain the spread of an airborne virus. Sars-Cov-2 mainly spreads via minute aerosols that can remain suspended for days in the air. The virus passes easily through cloth masks,as well as surgical masks, given that the diameter of Sars-Cov-2 is ~0.1 microns and the diameter of the mask pore is ~13-585 microns for surgical masks and ~80-500 microns for cloth masks
- There is extremely limited scientific data supporting the idea that a face mask can contain the spread of an aerosolised virus and this data is restricted to the use of well fitted surgical mask (N95 masks) in specific settings and while following extensive protocols. These conditions are certainly not met in the case of mask use in the general public.
- 3.5 Masks are not innocuous. There is a significant body of evidence, based on data going back many years, that masks can cause harm, especially in children.

- 3.5.1 "Exercising with facemasks may reduce available Oxygen and increase air trapping preventing substantial carbon dioxide exchange. The hypercapnic hypoxia may potentially increase acidic environment, cardiac overload, anaerobic metabolism and renal overload, which may substantially aggravate the underlying pathology of established chronic diseases. Further contrary to the earlier thought, no evidence exists to claim the facemasks during exercise offer additional protection from the droplet transfer of the virus." Exercise with facemask; Are we handling a devil's sword?- A physiological hypothesis, Chandrasekaran, 2020
- 3.5.2 "First RCT of cloth masks, and the results caution against the use of cloth masks. This is an important finding to inform occupational health and safety. Moisture retention, reuse of cloth masks and poor filtration may result in increased risk of infection...the rates of all infection outcomes were highest in the cloth mask arm, with the rate of ILI statistically significantly higher in the cloth mask arm (relative risk (RR)=13.00, 95% CI 1.69 to 100.07) compared with the medical mask arm. Cloth masks also had significantly higher rates of ILI compared with the control arm. An analysis by mask use showed ILI (RR=6.64, 95% CI 1.45 to 28.65) and laboratory-confirmed virus (RR=1.72, 95% CI 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% and medical masks 44%." A cluster randomised trial of cloth masks compared with medical masks in healthcare workers, MacIntyre, 2015
- 3.5.3 "Kids need to see faces," Jay Bhattacharya, a professor of medicine at Stanford University, told The Post. Youngsters watch people's mouths to learn to speak, read and understand emotions, he said. "We have this idea that this disease is so bad that we must adopt any means necessary to stop it from spreading," he said. "It's not that masks in schools have no costs. They actually do have substantial costs." <u>US mask guidance for kids is the strictest across the world</u>, <u>Skelding</u>, 2021
- "This is important because children and/or students do not have the speech or language ability that adults have they are not equally able and the ability to see the face and especially the mouth is critical to language acquisition which children and/or students are engaged in at all times. Furthermore, the ability to see the mouth is not only essential to communication but also essential to brain development."

  Masking young children in school harms language acquisition, Walsh, 2021

- 3.5.5 "Do masks reduce Covid transmission in children? Believe it or not, we could find only a single retrospective study on the question, and its results were inconclusive. Yet two weeks ago the Centers for Disease Control and Prevention sternly decreed that 56 million U.S. children and adolescents, vaccinated or not, should cover their faces regardless of the prevalence of infection in their community. Authorities in many places took the cue to impose mandates in schools and elsewhere, on the theory that masks can't do any harm. That isn't true. Some children are fine wearing a mask, but others struggle. Those who have myopia can have difficulty seeing because the mask fogs their glasses. (This has long been a problem for medical students in the operating room.) Masks can cause severe acne and other skin problems. The discomfort of a mask distracts some children from learning. By increasing airway resistance during exhalation, masks can lead to increased levels of carbon dioxide in the blood. And masks can be vectors for pathogens if they become moist or are used for too long." The Case Against Masks for Children, Makary, 2021
- 3.5.6 "The average wearing time of the mask was 270 minutes per day. Impairments caused by wearing the mask were reported by 68% of the parents. These included irritability (60%), headache (53%), difficulty concentrating (50%), less happiness (49%), reluctance to go to school/kindergarten (44%), malaise (42%) impaired learning (38%) and drowsiness or fatigue (37%)." Corona children studies: Co-Ki: First results of a German-wide registry on mouth and nose covering (mask) in children, Schwarz, 2021
- 3.5.7 "Masks were contaminated with bacteria, parasites, and fungi, including three with dangerous pathogenic and pneumonia-causing bacteria." <u>Dangerous pathogens found on children's face masks</u>, Cabrera, 2021
- "Laboratory testing of used masks from 20 train commuters revealed that 11 of the 20 masks tested contained over 100,000 bacterial colonies. Molds and yeasts were also found. Three of the masks contained more than one million bacterial colonies... The outside surfaces of surgical masks were found to have high levels of the following microbes, even in hospitals, more concentrated on the outside of masks than in the environment. Staphylococcus species (57%) and Pseudomonas spp (38%) were predominant among bacteria, and Penicillium spp (39%) and Aspergillus spp. (31%) were the predominant fungi." Masks, false safety and real dangers, Part 2: Microbial challenges from masks, Borovoy, 2020/2021

- "Considering our findings, pulse rates of the surgeon's increase and SpO2 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, our findings may have a clinical value for the health workers and the surgeons." Preliminary report on surgical mask induced deoxygenation during major surgery, Beder, 2008
- 3.5.10 "Wearing facemasks has been demonstrated to have substantial adverse physiological and psychological effects. These include hypoxia, hypercapnia, shortness of breath, increased acidity and toxicity, activation of fear and stress response, rise in stress hormones, immunosuppression, fatigue, headaches, decline in cognitive performance, predisposition for viral and infectious illnesses, chronic stress, anxiety and depression." Facemasks in the COVID-19 era: A health hypothesis, Vainshelboim, 2021
- 3.5.11 "How long are parents going to continue masking their children causing great harm to them, even to the point of risking their lives? Dr. Eric Nepute in St. Louis took time to record a video rant that he wants everyone to share, after the 4-year-old child of one of his patients almost died from a bacterial lung infection caused by prolonged mask use." How many children must die? Shilhavy, 2020
- "Wearing a mask is not without side effects. Oxygen deficiency (headache, nausea, fatigue, loss of concentration) occurs fairly quickly, an effect similar to altitude sickness. Every day we now see patients complaining of headaches, sinus problems, respiratory problems and hyperventilation due to wearing masks. In addition, the accumulated CO2 leads to a toxic acidification of the organism which affects our immunity. Some experts even warn of an increased transmission of the virus in case of inappropriate use of the mask." Open Letter from Medical Doctors and Health Professionals to All Belgian Authorities and All Belgian Media, AIER, 2020
- Masks, especially homemade items and cloth masks, cannot contain the spread of SARS-CoV-2 or COVID-19. Proposed Regulation 67 cannot therefore contribute to alleviating the disaster in any way and has demonstrably not contributed to diminishing the impact of the virus of the disease in any way over the course of the last two years. Imposing a mask mandate is irrational and it is plainly not a measure that, even on the widest possible interpretation of Section 27 is within the Minister's powers after the end of the state of disaster. Regulation 29 will not contribute in any way to

creating a situation where normality is restored, the effects of the disaster are mitigated or the circumstances are created that will reduce the risk of a similar disaster occurring.

#### 4 PROPOSED REGULATION 67 - SOCIAL DISTANCING

- 4.1 There is no scientific basis whatsoever for social distancing of 1m. Because it is an aerosolised virus, SARS-CoV-2 floats in the air and is not deterred by social distancing.
- There is no evidence that countries that have mandated social distancing have had a better experience of the Outbreak than countries that did not. Social distancing is a novel concept that has not worked to curb the spread of the virus. It was not recommended in any pre-Covid pandemic respiratory virus guidelines, not even in the 2019 update of the WHO's guidelines.

### 5 PROPOSED REGULATION 69 - PCR TESTS & VACCINATION

5.1 PCR tests are not sensitive enough to ensure that someone who tests negative 72 hours before travelling won't be carrying the virus and able to transmit it on arrival. The vaccinated are not required to submit a test but they can still transmit the virus. PCR tests often remain positive for up to 3 months after testing and could therefore result in travellers being trapped in the country, incurring extra costs and hurting our own economy and tourism. Additionally, the status of PCR tests and RT\_PCR testing kits has been withdrawn by both the FDA and the CDC Research has shown them to be very unreliable indicators of infection especially at high cycle thresholds (e.g., 97% of positive tests are false at Ct of 35).

# 5.2 Effect of the Vaccines on Transmission

The vaccines do not prevent infection nor do they prevent, or materially reduce transmission of the virus. These effects were not endpoints in the scientific trials and the observational studies conducted since the vaccines were released show that the viral loads of vaccinated and unvaccinated people are the same, that vaccinated people transmit the virus and that countries that there has been no reduction in transmission in countries that have <a href="high-vaccination-rates">high-vaccination-rates</a>. Several studies document large numbers of breakthrough cases (<a href="Ref">Ref</a>, <a href="Ref">Ref</a>, <a

produces similar viral loads in the vaccinated and unvaccinated population (Ref, Ref, Ref, Ref). Early data on the Omicron variant, suggests that it is even more adept at escaping vaccine protection against infection (Ref, Ref, Ref). Specific references to the scientific literature are set out below.

- 5.2.1 Acharya et al. found "no significant difference in cycle threshold values between vaccinated and unvaccinated, asymptomatic and symptomatic groups infected with SARS-CoV-2 Delta."
- 5.2.2 Dr Herman Edeling's study found that, "One has read, and previously made publicly available, copies of numerous scientific articles that have found that the Covid-19 "vaccines" are not effective at prevention of infection or transmission of the SARS- CoV-2 virus. Examples of such scientific articles can be found at <a href="the Edeling Medico-Legal Consultancy Trust">the Edeling Medico-Legal Consultancy Trust</a>, where each document bearing the prefix "NE" provides scientific evidence that the Covid-19 "vaccines" are not effective." "An abundance of scientific evidence finds that the Covid-19 "vaccines" are not effective at preventing infection by or transmission of the SARS-CoV-2 virus."
- Riemersma et al. found, "no difference in viral loads when comparing unvaccinated individuals to those who have vaccine "breakthrough" infections. Furthermore, individuals with vaccine breakthrough infections frequently test positive with viral loads consistent with the ability to shed infectious viruses." Results indicate that "if vaccinated individuals become infected with the delta variant, they may be sources of SARS-CoV-2 transmission to others." They reported "low Ct values (<25) in 212 of 310 fully vaccinated (68%) and 246 of 389 (63%) unvaccinated individuals. Testing a subset of these low-Ct samples revealed infectious SARS-CoV-2 in 15 of 17 specimens (88%) from unvaccinated individuals and 37 of 39 (95%) from vaccinated people."
- Riemersma et al. reported that vaccinated individuals who get infected with the Delta variant can transmit SARS-CoV-2 to others. They found an elevated viral load in the unvaccinated and vaccinated symptomatic persons (68% and 69% respectively, 158/232 and 156/225). Moreover, in the asymptomatic persons, they uncovered elevated viral loads (29% and 82% respectively) in the unvaccinated and the vaccinated respectively. This suggests that the vaccinated can be infected, harbor, cultivate, and transmit the virus readily and unknowingly.

- 5.2.5 Chau et al. looked at transmission of SARS-CoV-2 Delta variant among vaccinated healthcare workers in Vietnams. Of 69 healthcare workers that tested positive for SARS-CoV-2, 62 participated in the clinical study, all of whom recovered. For 23 of them, complete-genome sequences were obtained, and all belonged to the Delta variant. "Viral loads of breakthrough Delta variant infection cases were 251 times higher than those of cases infected with old strains detected between March-April 2020". In other words, the viral load in vaccinated individuals was found to be significantly higher than in unvaccinated individuals.
- 5.2.6 In Barnstable, Massachusetts, <u>Brown et al found</u> that among 469 cases of COVID-19, 74% were fully vaccinated, and that "the vaccinated had on average more virus in their nose than the unvaccinated who were infected."
- 5.2.7 <u>Subramanian reported that</u>, "at the country-level, there appears to be no discernable relationship between percentage of population fully vaccinated and new COVID-19 cases." When comparing 2,947 counties in the United States, there was no clear discernible relationship between vaccination and a reduction in cases.
- 5.2.8 Reporting on a <u>nosocomial hospital outbreak</u> in Finland, Hetemäli et al. observed that "both symptomatic and asymptomatic infections were found among vaccinated health care workers, and secondary transmission occurred from those with symptomatic infections despite use of personal protective equipment."
- 5.2.9 In a hospital outbreak investigation in Israel, <u>Shitrit et al. observed</u> "high transmissibility of the SARS-CoV-2 Delta variant among twice vaccinated and masked individuals."
- 5.2.10 Singanayagam et. al found that, "[F]ully vaccinated individuals with breakthrough infections have peak viral load similar to unvaccinated cases and can efficiently transmit infection in household settings, including to fully vaccinated contacts. Host-virus interactions early in infection may shape the entire viral trajectory." They found that (in 602 community contacts (identified via the UK contract-tracing system) of 471 UK COVID-19 index cases were recruited to the Assessment of Transmission and Contagiousness of COVID-19 in Contacts cohort study and contributed 8145 upper respiratory tract samples from daily sampling for up to 20 days) "vaccination reduces the risk of delta variant infection and accelerates viral clearance. Nonetheless, fully vaccinated individuals with breakthrough infections have peak viral

load similar to unvaccinated cases and can efficiently transmit infection in household settings, including to fully vaccinated contacts."

A very recent study published by the CDC reported that a majority (53%) of patients who were hospitalized with Covid-19-like illnesses were already fully vaccinated with two-dose RNA shots. Table 1 reveals that among the 20,101 immunocompromised adults hospitalized with Covid-19, 10,564 (53%) were fully-vaccinated with the Pfizer or Moderna vaccine (Vaccination was defined as having received exactly 2 doses of an mRNA-based COVID-19 vaccine ≥14 days before the hospitalization index date, which was the date of respiratory specimen collection associated with the most recent positive or negative SARS-CoV-2 test result before the hospitalization or the hospitalization date if testing only occurred after the admission). This highlights the ongoing challenges faced with Delta breakthrough when vaccinated.

5.2.12 Salvatore et al. examined the transmission potential of vaccinated and unvaccinated persons infected with the SARS-CoV-2 Delta variant in a federal prison, July-August 2021. They found a total of 978 specimens were provided by 95 participants, "of whom 78 (82%) were fully vaccinated and 17 (18%) were not fully vaccinated....clinicians and public health practitioners should consider vaccinated persons who become infected with SARS-CoV-2 to be no less infectious than unvaccinated persons."

5.2.13

Di Fusco et al. conducted an evaluation of COVID-19 vaccine breakthrough infections among immunocompromised patients fully vaccinated with BNT162b2. "COVID-19 vaccine breakthrough infections were examined in fully vaccinated (≥14 days after 2nd dose) IC individuals (IC cohort), 12 mutually exclusive IC condition groups, and a non-IC cohort." They found that of 1,277,747 individuals ≥16 years of age who received 2 BNT162b2 doses, 225,796 (17.7%) were identified as IC (median age: 58 years; 56.3% female). The most prevalent IC conditions were solid malignancy (32.0%), kidney disease (19.5%), and rheumatologic/inflammatory conditions (16.7%). Among the fully vaccinated IC and non-IC cohorts, a total of 978 breakthrough infections were observed during the study period; 124 (12.7%) resulted in hospitalization and 2 (0.2%) were inpatient deaths. IC individuals accounted for 38.2% (N = 374) of all breakthrough infections, 59.7% (N = 74) of all hospitalizations, and 100% (N = 2) of inpatient deaths. The proportion with breakthrough infections was 3 times higher in the IC cohort compared to the non-IC cohort (N = 374 [0.18%] vs. N = 604

[0.06%]; unadjusted incidence rates were 0.89 and 0.34 per 100 person-years, respectively."

5.2.14 Mallapaty (NATURE) reported that the protective effect of being vaccinated if you already had infection is "relatively small, and dwindles alarmingly at three months after the receipt of the second shot." Mallapaty further adds what we have been warning the public health community which is that persons infected with Delta have about the same levels of viral genetic materials in their noses "regardless of whether they'd previously been vaccinated, suggesting that vaccinated and unvaccinated people might be equally infectious." Mallapaty reported on testing data from 139,164 close contacts of 95,716 people infected with SARS-CoV-2 between January and August 2021 in the United Kingdom, and at a time when the Alpha and Delta variants were competing for dominance. The finding was that "although the vaccines did offer some protection against infection and onward transmission, Delta dampened that effect. A person who was fully vaccinated and then had a 'breakthrough' Delta infection was almost twice as likely to pass on the virus as someone who was infected with Alpha. And that was on top of the higher risk of having a breakthrough infection caused by Delta than one caused by Alpha."

5.2.15 Wilhelm et al. reported on reduced neutralization of SARS-CoV-2 omicron variant by vaccine sera and monoclonal antibodies. "in vitro findings using authentic SARS-CoV-2 variants indicate that in contrast to the currently circulating Delta variant, the neutralization efficacy of vaccine-elicited sera against Omicron was severely reduced highlighting T-cell mediated immunity as essential barrier to prevent severe COVID-19."

5.2.16 CDC reported on the details for 43 cases of COVID-19 attributed to the Omicron variant. They found that "34 (79%) occurred in persons who completed the primary series of an FDA-authorized or approved COVID-19 vaccine ≥14 days before symptom onset or receipt of a positive SARS-CoV-2 test result."

5.2.17 Dejnirattisai et al. presented live neutralisation titres against SARS-CoV-2 Omicron variant, and examined it relative to neutralisation against the Victoria, Beta and Delta variants. They reported a significant drop in "neutralisation titres in recipients of both AZD1222 and BNT16b2 primary courses, with evidence of some recipients failing to neutralise at all."

- 5.2.18 Cele et al. assessed whether Omicron variant escapes antibody neutralization "elicited by the Pfizer BNΠ62b2 mRNA vaccine in people who were vaccinated only or vaccinated and previously infected." They reported that Omicron variant "still required the ACE2 receptor to infect but had extensive escape of Pfizer elicited neutralization."
- UK reporting showed that boosters protect against symptomatic COVID-19 caused by Omicron for about 10 weeks; the UK Health Security Agency reported protection against symptomatic COVID-19 caused by the variant dropped from 70% to 45% following a Pfizer booster for those initially vaccinated with the shot developed by Pfizer with BioNTech. Specifically reporting by the UK Health Security Agency showed "Among those who received an AstraZeneca primary course, vaccine effectiveness was around 60% 2 to 4 weeks after either a Pfizer or Moderna booster, then dropped to 35% with a Pfizer booster and 45% with a Moderna booster by 10 weeks after the booster. Among those who received a Pfizer primary course, vaccine effectiveness was around 70% after a Pfizer booster, dropping to 45% after 10-plus weeks and stayed around 70 to 75% after a Moderna booster up to 9 weeks after booster."
- Buchan et al. used a test-negative design to assess vaccine effectiveness against OMICRON or DELTA variants (regardless of symptoms or severity) during November 22 and December 19, 2021. They found that receipt of 2 doses of COVID-19 vaccines was not protective against Omicron. Vaccine effectiveness against Omicron was 37% (95%CI, 19-50%) ≥7 days after receiving an mRNA vaccine for the third dose."
- 5.2.21

  Public Health Scotland COVID-19 & Winter Statistical Report (
  Publication date: 19 January 2022) provided startling data on page 38 (case rates), page 44 (hospitalization), and page 50 (deaths), showing that the vaccination has failed Delta but critically, is failing omicron. It shows across the multiple weeks of study that across each dose (1 vs 2 vs 3 booster inoculations) that the vaccinated are greatly more infected than the unvaccinated, with the 2nd dose being alarmingly elevated. Age-standardized rates of acute hospital admissions are stunningly elevated after 2nd inoculation (over the unvaccinated) during January 2022.
- 5.2.22 Regev-Yochay et al. in Israel looked at (publication date March 16th 2022) the immunogenicity and safety of a fourth dose (4th) of either BNT162b2 (Pfizer-BioNTech) or mRNA-1273 (Moderna) administered 4

months after the third dose in a series of three BNTI62b2 doses). This was an open-label, nonrandomized clinical study. Researchers reported that most of the infected participants were potentially infectious, with relatively high viral loads (nucleocapsid gene cycle threshold, ≤25)'. Researchers 'observed low vaccine efficacy against infections in health care workers, as well as relatively high viral loads suggesting that those who were infected were infectious. Thus, a fourth vaccination of healthy young health care workers may have only marginal benefits'.

## 5.3 Effect of the Vaccines on Susceptibility to Infection

There are studies that suggest that the vaccinated are more susceptible to infection.

- 5.3.1 In a study from Qatar, <u>Chemaitelly et al. reported</u> vaccine efficacy (Pfizer) against severe and fatal disease, with efficacy in the 85-95% range at least until 24 weeks after the second dose. As a contrast, the efficacy against infection waned down to around 30% at 15-19 weeks after the second dose.
- 5.3.2 In the <u>UK COVID-19 vaccine Surveillance Report for week #42</u>, it was noted that there is "waning of the N antibody response over time" and "that N antibody levels appear to be lower in individuals who acquire infection following 2 doses of vaccination." The same report (Table 2, page 13), shows that in the older age groups above 30, the double vaccinated persons have greater infection risk than the unvaccinated.
- 5.3.3 The UK's COVID-19 vaccine surveillance report Week 3, 20 January 2022, raises very serious concern as to the failure of the vaccines on Delta (which is basically now being replaced by omicron for dominance) and omicron. We see greater case numbers of cases for the 2nd and 3rd inoculations with persons in receipt of the 3rd inoculation (booster) at far greater risk of infection/cases than the unvaccinated (30 years of age and above age strata).
- In the recent UK Public Health surveillance reports <u>Week 9</u>, <u>Week 8</u>, as well as <u>week 7</u> (UK COVID-19 vaccine surveillance report Week 7 17 February 2022), <u>week 6</u> (COVID-19 vaccine surveillance report Week 6 10 February 2022) and <u>week 5</u> for 2022 (COVID-19 vaccine surveillance report Week 5 3 February 2022) as well as the reports accumulated for 2021 since vaccine roll-out, we see that the vaccinated are at higher

risk of infection and especially for age groups above 18 years old, as well as hospitalization and even death. This is particularly marked for those in receipt of double vaccinations. There is increased risk of death for those who are triple vaccinated and especially as age increases. The same pattern emerges in the Scottish data.

## 5.4 Waning of the Vaccine Effect

The efficacy of the vaccines may have been exaggerated by the manufacturers. Several studies show that it wanes quickly, turning into negative effectiveness in the face of new variants.

- Neil et al. 2021, "The ONS data provide no reliable evidence that the vaccine reduces all-cause mortality" ...."By Occam's razor we believe the most likely explanations are systemic miscategorisation of deaths between the different categories of unvaccinated and vaccinated; delayed or non-reporting of vaccinations; systemic underestimation of the proportion of unvaccinated; and/or incorrect population selection for Covid deaths."
- 5.4.2 <u>Goldberg et al.</u>, 2021 (BNT162b2 Vaccine in Israel) reported that "immunity against the delta variant of SARS-CoV-2 waned in all age groups a few months after receipt of the second dose of vaccine."
- 5.4.3 Eyre et al., 2021 looked at The impact of SARS-CoV-2 vaccination on Alpha & Delta variant transmission. They reported that "while vaccination still lowers the risk of infection, similar viral loads in vaccinated and unvaccinated individuals infected with Delta question how much vaccination prevents onward transmission... transmission reductions declined over time since second vaccination, for Delta reaching similar levels to unvaccinated individuals by 12 weeks for ChAdOx1 and attenuating substantially for BNT162b2. Protection from vaccination in contacts also declined in the 3 months after second vaccination...vaccination reduces transmission of Delta, but by less than the Alpha variant."
- 5.4.4 Levine-Tiefenbrun, 2021 looked at Viral loads of Delta-variant SARS-CoV-2 breakthrough infections after vaccination and booster with BNT162b2, and reported the viral load reduction effectiveness declines with time after vaccination, "significantly decreasing at 3 months after vaccination and effectively vanishing after about 6 months."

5.4.5 <u>Hansen et al</u>, 2021 demonstrate negative vaccine effectiveness in vaccinated individuals when exposed to Omicron after just 3 months from the injection. This means that vaccinated individuals are more likely to catch the virus and spread it.

**Table** Estimated vaccine effectiveness for BNT162b2 and mRNA-1273 against infection with the SARS-CoV-2 Omicron and Delta variants during November 20 – December 12, 2021, Denmark.

	Pfizer – BNT162b2				Moderna - mRNA-1273			
Time since vaccine	Omicron		Delta		Omicron		Delta	
protection	Cases	VE, % (95% CI)	Cases	VE, % (95% CI)	Cases	VE, % (95% CI)	Cases	VE, % (95% CI)
1-30 days	14	55.2 (23.5; 73.7)	171	86.7 (84.6; 88.6)	4	36.7 (-69.9; 76.4)	29	88.2 (83.1; 91.8)
31-60 days	32	16.1 (-20.8; 41.7)	454	80.9 (79.0; 82.6)	8	30.0 (-41.3; 65.4)	116	81.5 (77.7; 84.6)
61-90 days	145	9.8 (-10.0; 26.1)	3,177	72.8 (71.7; 73.8)	48	4.2 (-30.8; 29.8)	1,037	72.2 (70.4; 74.0)
91-150 days	2,851	<u>-76.5 (-95.3;-59.5)</u>	34,947	53.8 (52.9; 54.6)	393	-39.3 (-61.6;-20.0)	3,459	65.0 (63.6; 66.3)
1-30 days after	booster va	ccination						
protection	29	54.6 (30.4; 70.4)	453	81.2 (79.2; 82.9)	-	-	5	82.8 (58.8; 92.9)

CI = confidence intervals; VE = vaccine effectiveness. VE estimates adjusted for 10-year age groups, sex and region (five geographical regions). Vaccine protection was assumed 14 days post 2<sup>nd</sup> dose. Insufficient data to estimate mRNA-1273 booster VE against Omicron.

# 5.5 **Natural Immunity**

The Proposed Regulations take no account of natural immunity which is rampant in South Africa with estimates consistently pointing to around 80% of the population having been infected. Studies show that natural immunity against coronavirus is robust, long-lasting, and effective even in the case of mutations. Natural immunity protects against infection, which vaccines do not and is therefore more relevant to controlling the spread of the virus than vaccination. It is therefore irrational not to take it into account.

- 5.5.1 Eyran. 2020 examined The longitudinal kinetics of antibodies in COVID-19 recovered patients over 14 months, and found "a significantly faster decay in naïve vaccinees compared to recovered patients suggesting that the serological memory following natural infection is more robust compared to vaccination. Our data highlights the differences between serological memory induced by natural infection vs. vaccination."
- 5.5.2 One-year sustained cellular and humoral immunities of COVID-19 convalescents, by Jie Zhang et al showed that in COVID-19 convalescents from 6 months to 12 months after disease onset the percentages of convalescents with positive SARS-CoV-2-specific T-cell

responses (at least one of the SARS-CoV-2 antigen S1, S2, M and N protein) were 71/76 (93%) and 67/73 (92%) at 6m and 12m, respectively. Furthermore, both antibody and T-cell memory levels of the convalescents were positively associated with their disease severity."

- 5.5.3 Comparing SARS-CoV-2 natural immunity to vaccine-induced immunity: reinfections versus breakthrough infections, by Sivan Gazit et al concluded that, "Our analysis demonstrates that SARS-CoV-2-naïve vaccinees had a 13.06-fold increased risk for breakthrough infection with the Delta variant compared to those previously infected, when the first event (infection or vaccination) occurred during January and February of 2021. The increased risk was significant for a symptomatic disease as well.... This analysis demonstrated that natural immunity affords longer lasting and stronger protection against infection, symptomatic disease and hospitalization due to the Delta variant of SARS-CoV-2, compared to the BNT162b2 two-dose vaccine-induced immunity."
- 5.5.4 Necessity of COVID-19 vaccination in previously infected individuals, by Nabin K. Shrestha et al found that "Individuals who have had SARS-CoV-2 infection are unlikely to benefit from COVID-19 vaccination, and vaccines can be safely prioritized to those who have not been infected before."
- 5.5.5 Discrete Immune Response Signature to SARS-CoV-2 mRNA Vaccination Versus Infection, by Ellie Ivanova, Joseph Devlin, et al. found that, "While both infection and vaccination induced robust innate and adaptive immune responses, our analysis revealed significant qualitative differences between the two types of immune challenges. In COVID-19 patients, immune responses were characterized by a highly augmented interferon response which was largely absent in vaccine recipients."
- 5.5.6 Longitudinal analysis shows durable and broad immune memory after SARS-CoV-2 infection with persisting antibody responses and memory B and T cells, by Kristen W. Cohen et al noted that, "Ending the COVID-19 pandemic will require long-lived immunity to SARS-CoV-2. We evaluated 254 COVID-19 patients longitudinally from early infection and for eight months thereafter and found a predominant broad-based immune memory response. SARS-CoV-2 spike binding and neutralizing antibodies exhibited a bi-phasic decay with an extended half-life of >200 days suggesting the generation of longer-lived plasma cells. In addition, there was a sustained IgG+ memory B

cell response, which bodes well for a rapid antibody response upon virus re-exposure."

- 5.5.7 In Incidence of Severe Acute Respiratory Syndrome Coronavirus-2 infection among previously infected or vaccinated employees, Kojima et al found, "no difference in the infection incidence between vaccinated individuals and individuals with previous infection."
- 5.5.8 Immunological memory to SARS-CoV-2 assessed for up to 8 months after infection, Jennifer M. Dan et al "analyzed multiple compartments of circulating immune memory to SARS-CoV-2 in 254 samples from 188 COVID-19 cases, including 43 samples at ≥ 6 months post-infection. IgG to the Spike protein was relatively stable over 6+ months."
- 5.5.9 Persistence of neutralizing antibodies a year after SARS-CoV-2 infection, by Anu Haveri et al "assessed the persistence of serum antibodies following wild-type SARS-CoV-2 infection six and twelve months after diagnosis in 367 individuals of whom 13% had severe disease requiring hospitalization. We determined the SARS-CoV-2 spike (S-IgG) and nucleoprotein IgG concentrations and the proportion of subjects with neutralizing antibodies (NAb)."
- 5.5.10 Quantifying the risk of SARS-CoV-2 reinfection over time-Eamon O Murchu et al found that, "naturally acquired SARS-CoV-2 immunity does not wane for at least 10 months post-infection."
- 5.5.11 SARS-CoV-2 antibody-positivity protects against reinfection for at least seven months with 95% efficacy. Abu-Raddad et al noted that "Reinfection is rare in the young and international population of Qatar. Natural infection appears to elicit strong protection against reinfection with an efficacy ~95% for at least seven months."
- Protection of previous SARS-CoV-2 infection is similar to that of BNTI62b2 vaccine protection: A three-month nationwide experience from Israel, by Yair Goldberg et al found that "the overall estimated level of protection from prior SARS-CoV-2 infection for documented infection is 94.8% (CI:[94.4, 95.1]); hospitalization 94.1% (CI:[91.9, 95.7]); and severe illness 96.4% (CI:[92.5, 98.3]). Our results question the need to vaccinate previously-infected individuals."

- Immune Memory in Mild COVID-19 Patients and Unexposed Donors
  Reveals Persistent T Cell Responses After SARS-CoV-2 Infection, by
  Asgar Ansari et al "found detectable immune memory in mild COVID19 patients several months after recovery in the crucial arms of
  protective adaptive immunity." "This study provides the evidence of
  both high magnitude pre-existing and persistent immune memory in
  Indian population."
- 5.5.14 <u>Highly functional virus-specific cellular immune response in asymptomatic SARS-CoV-2 infection</u>, by Nina Le Bert et al found that "asymptomatic SARS-CoV-2-infected individuals are not characterized by weak antiviral immunity; on the contrary, they mount a highly functional virus-specific cellular immune response."
- 5.5.15 SARS-CoV-2 re-infection risk in Austria, by Stefan Pilz et al confirmed that "Protection against SARS-CoV-2 after natural infection is comparable with the highest available estimates on vaccine efficacies."
- 5.5.16 Anti-spike antibody response to natural SARS-CoV-2 infection in the general population, by Jia Wei et al noted that, "We estimated antibody levels associated with protection against reinfection likely last 1.5-2 years on average, with levels associated with protection from severe infection present for several years. These estimates could inform planning for vaccination booster strategies."
- 5.5.17 SARS-CoV-2 infection rates of antibody-positive compared with antibody-negative health-care workers in England: a large, multicentre, prospective cohort study (SIREN), by Victoria Jane Hall et al found that, "A previous history of SARS-CoV-2 infection was associated with an 84% lower risk of infection, with median protective effect observed 7 months following primary infection. This time period is the minimum probable effect because seroconversions were not included. This study shows that previous infection with SARS-CoV-2 induces effective immunity to future infections in most individuals."
- 5.5.18 SARS-CoV-2 Natural Antibody Response Persists for at Least 12 Months in a Nationwide Study From the Faroe Islands, by Maria Skaalum Petersen et al showed that, "Although the protective role of antibodies is currently unknown, our results show that SARS-CoV-2 antibodies persisted at least 12 months after symptom onset and maybe even longer, indicating that COVID-19-convalescent individuals may be protected from reinfection. Our results represent SARS-CoV-2 antibody immunity in nationwide cohorts in a setting with few

undetected cases, and we believe that our results add to the understanding of natural immunity and the expected durability of SARS-CoV-2 vaccine immune responses. Moreover, they can help with public health policy and ongoing strategies for vaccine delivery."

- Associations of Vaccination and of Prior Infection With Positive PCR Test Results for SARS-CoV-2 in Airline Passengers Arriving in Qatar, by Roberto Bertollini et al found that, "Of 9180 individuals with no record of vaccination but with a record of prior infection at least 90 days before the PCR test (group 3), 7,694 could be matched to individuals with no record of vaccination or prior infection (group 2), among whom PCR positivity was 1.01% (95% CI, 0.80%-1.26%) and 3.81% (95% CI, 3.39%-4.26%), respectively. The relative risk for PCR positivity was 0.22 (95% CI, 0.17-0.28) for vaccinated individuals and 0.26 (95% CI, 0.21-0.34) for individuals with prior infection compared with no record of vaccination or prior infection."
- 5.5.20 Longitudinal observation of antibody responses for 14 months after SARS-CoV-2 infection, by Puya Dehgani-Mobaraki et al noted, "In Conclusion, our study findings are consistent with recent studies reporting antibody persistency suggesting that induced SARS-CoV-2 immunity through natural infection, might be very efficacious against re-infection (>90%) and could persist for more than six months. Our study followed up patients up to 14 months demonstrating the presence of anti-S-RBD IgG in 96.8% of recovered COVID-19 subjects."
- The imposition of restrictions on individuals and on venues based on vaccination status is reliant on the myth that the vaccines make public spaces safer. The vaccines in fact offer no protection against transmission and therefore do not make spaces inhabited by vaccinated people any safer than those inhabited by unvaccinated individuals. The safest spaces are those inhabited by recovered individuals. Regulation 69 is irrational. It is also plainly unconstitutional in that it discriminates unfairly against unvaccinated people, who pose no greater risk than vaccinated people.

### 6 PROPOSED REGULATION 75 - VACCINATION

As noted above, the vaccines do not prevent infection or transmission and do not therefore make public spaces safer. The requirement that persons entering South Africa be vaccinated is therefore irrational and since it applies to South African citizens, it is also plainly unconstitutional.

6.2 As noted above, PCR tests are unfit for purpose and Regulation 75 is so vague in relation to testing that it is unworkable. Moreover, the cession of sovereignty to the World Health Organisation is inappropriate and unconstitutional.

### 7 CONCLUSION

- 7.1 The Proposed Regulations are irrational. There is patently no occurrence in South Africa of such a magnitude that it qualifies as a "disaster".
- 7.2 The Minister's delay in terminating the disaster is unconscionable. The reason given for not ending the state of disaster, that government requires even more time than the two years it has had, to put in place "permanent legislation" makes no sense. There must objectively be a "disaster" in order to maintain a state of disaster. Once the disaster ends, whether or not government is ready to face the next disaster, the state of disaster must end. If another disaster occurs and the government is still not prepared, the Minister can declare another disaster. The Minister does not have the power to maintain a disaster in the current circumstances where objectively no disaster exists.
- 7.3 The Minister has no power to make regulations relating to masking, vaccination and social distancing after the state of disaster has terminated. Any regulations that purport to do this will be invalid.
- There is no scientific basis for employing mandatory masking and social distancing as measures to address the COVID-19 pandemic. Vaccination does not protect against infection or transmission and cannot contribute to herd immunity. The vaccinated are no safer to be around than the unvaccinated and imposing any entry requirements, whether to the country or to events, based on vaccination status is irrational and illegal. Herd immunity can currently only be attained through prior infection. We have high levels of prior infection in South Africa and the fact that the regulations do not recognise natural immunity as superior to, let alone equivalent to, so-called vaccine immunity (the vaccine in fact offers no protection against infection), renders the Proposed Regulations irrational.