## A Critical Analysis of Legal and Policy Responses to the COVID-19 Pandemic and its Long-term Impacts in Taiwan

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#### ABSTRACT

The COVID-19 pandemic has dramatically impacted public health and economic and social stability worldwide since the WHO's Public Health Emergency of International Concerns declaration in early March 2020. The COVID-19 virus was first discovered in December 2019 in Wuhan city, China, and eventually resulted in the global pandemic, of which the cumulative cases have reached 181,367,824 at the time of writing. Taiwan encountered severe public health threats because of the frequent travelers as many as 10 million who commuted annually between mainland China and Taiwan. Recognizing the imminent threats arising from an intensive flow of people from mainland China due to the lockdown policy adopted by the Chinese government, Taiwan has adopted strict border control, sophisticated contact tracing and monitoring measures, and most importantly the securing of sufficient Personal Protection Equipment supply for citizens to prevent community spread. Taiwan's quick and precise COVID-19 response at the early stage of containing the virus has been proven very successful since the outbreak of the COVID-19 global pandemic in late February 2020. Taiwan is now struggling to fight the recent outbreak for lacking sufficient vaccines and testing capacities and shall learn from other country's experience for countermeasures against a massive epidemic. This article aims to explore the key elements for the early success of containing the COVID-19 virus, including the comprehensive legal framework for preventing infectious disease, highly trained public health officials and governance system, and citizen self-awareness. The article then discusses the potential legal controversies and their long-term impacts on Taiwan. Finally, this article provides the concluding observation and suggestions for fighting massive infectious diseases.

Keywords: COVID-19; public health; infectious disease; health law; pandemic control

#### **INTRODUCTION**

COVID-19 pandemic has dramatically impacted public health and economic and social stability worldwide since the WHO's Public Health Emergency of International Concerns declaration in early March 2020. The COVID-19 virus was first discovered in December 2019 in Wuhan city, China, which resulted in a nationwide pandemic. Due to geographic proximity, Taiwan encountered severe public health threats, and nearly 10 million Taiwanese and mainland residents travel between mainland China and Taiwan annually. Recognizing the imminent threats arising from Taiwanese citizens living in mainland but returning home due to the lockdown policy adopted by the Chinese government, the Taiwanese government took a series of early border control measures to contain the COVID-19 from entering Taiwan, such as implementing a travel ban to all flights and banning Chinese nationals from entering Taiwan since late January 2020. The early strict border control measures applying to all foreign travelers and Taiwanese citizens returning home from China, restriction policy on free movement, and data-based contact tracing system successfully contained the outbreak of COVID-19 at the early stage of the global pandemic. As a result, Taiwan achieved a remarkable record of 200 plus days without local infected cases until the third wave of provincial transmission struck the island in late April 2021.

The case of Taiwan provides a model to the world for its successful pandemic control measures to prevent local transmission of the COVID-19 virus at the early stage of the global pandemic. However, Taiwan's recent experience also provides a valuable lesson for the sudden strike of the COVID-19 variant since the Taiwanese government and society had become far too complacent. Therefore, this article first explores the legal framework that aims to prevent the occurrence and control of further transmission of the COVID-19 pandemic. Then, the article explores the main themes and objectives of the Special legislation that aims at the heightened pandemic control measures, sustaining strategic health-related resources, and building society's resilience as a whole. This article then examines the legal controversies as a result of legal responses to the COVID-19.

### LEGAL BASIS FOR PANDEMIC CONTROL MEASURES IN TAIWAN

From experience in containing the COVID-19 pandemic in many countries, including Taiwan, the pandemic control measures involve strict border control, stay-at-home orders, personal data collecting, contact tracing, and requisition of private properties. Those control measures could inevitably infringe on citizen rights and freedom and thus require a comprehensive and solid legal mandate, especially for those countries strictly complying with the principle of the rule of law. The following article explores and discusses the basic legal framework that contains the COVID-19 pandemic and the social and economic adaptation measures adopted by the Taiwan government.

#### CONSTITUTION

In response to emergency status or mass disaster, the Constitution Amendment authorizes the President, by resolution of the Executive Yuan Council, to issue emergency decrees and take all necessary measures to avert imminent danger that affects the security of the State or the people or to cope with any severe financial or economic crisis.1 Taiwan has only once issued the emergency decree since 1999. On September 21, 1999, Taiwan encountered the most severe earthquake, Jiji Great Earthquake (7.3 on the Richter Scale) in the post-war period, which killed 2,415 people with 11,305 severely wounded, destroyed or damaged more than 114,000 buildings, and left an estimated 100,000 people homeless. In response to the catastrophe, President Teng-hui Li issued the emergency decree authorized by the Constitution on September 25, 1999. The emergency decree was later approved on September 28. The State of emergency was declared because there was a lack of comprehensive framework legislation in response to disaster prevention and post-disaster reconstruction. The existing legal framework provided insufficient guidance and legal basis for effective and timely disaster recovery and rebuilding.

However, the Disaster Prevention and Protection Act has been established in response to the lack of a comprehensive legal framework concerning disaster prevention, recovery, and reconstruction since July 2000. The Disaster Prevention and Protection Act has been significantly amended in response to several large-scale natural disasters, such as the Morakot typhoons that killed 681 people in August

2009 and the Meinong Great Earthquake that killed 117 people in February 2016 since the enactment of the Disaster Prevention.<sup>2</sup> The President has been reluctant to declare a state of emergency authorized by the Constitution in response to large-scale natural disasters because the Disaster Prevention and Protection Act and related regulations provide a comprehensive legal framework to disaster prevention, rescue, and reconstruction.

In the case of COVID-19 control, similar decision-making following the large-scale disaster response since 1999 also applies to the present government in Taiwan. In this regard, President Ing-wen Tsai has not issued the emergency decree, even during the outbreak of community spread of coronavirus in Taiwan since mid-May 2021. However, the Constitutionality issues require further discussion and analysis even if the existing law provides a legal basis for strict disease control measures. First, the COVID-19 pandemic is a public emergency event that does not define "disaster" as illustrated in the context of the Disaster Prevention and Protection Law. Therefore, the different settings of the regulatory system dealing with a communicable disease as discussed shall be carefully examined and analyzed for its constitutionality. Second, the degree of damage to society due to infectious diseases may be less than the large-scale disaster in the instant time frame. However, the impacts on citizen rights and freedom due to pandemic control measures may last longer than natural disasters. In addition, lacking a clear legal mandate for some pandemic control measures may challenge their constitutionality. Some scholars and courts in the United States have argued that the constitutionality of isolation and quarantine orders relies on clear and compelling evidence available, proving that they are the least restrictive means of protecting the public's health. Third, many states, including Taiwan, have imposed international travel restrictions to contain the virus from the border, resulting in thousands of people not returning to their country of nationality or residence. Some commentators thus contend international restrictions' constitutionality for restricting people from returning to their home country and may also violate international human rights laws for banning people from returning to their states of nationality or residence.3 The strict border control measures could infringe the rights to family and private life. In Taiwan, international travel restrictions apply to non-citizen for entering Taiwan but not for Taiwan nationals. However, the Ministry of Education once issued international travel bans for students

and teachers and has been contended to violate the constitutional right of travel and freedom of movement.

#### COMMUNICABLE DISEASE CONTROL ACT

The Communicable Disease Control Act (CCDA) is the primary framework legislation dealing with health emergency events and authorizing health authorities to adopt prevention and control measures of infectious diseases. The essential and critical provisions for CDCA that allow the government to adopt strict COVID-19 responses, such as the definition and categorization of communicable disease, pandemic measures, and expropriation of private properties, will be highlighted. The CDCA first defines "Communicable Disease" as the disease categorized by the Ministry of Health and Wealth according to degrees of risks and hazards such as case fatality rate, incidence rate, and transmission speed.4 The COVID-19 meets Category 1 communicable diseases, including smallpox, plague, severe acute respiratory syndrome (SARS). In Category 1 infectious diseases outbreak, the CDCA authorizes establishing the Central Epidemic Command Center (CECC), which serves as the highest decision-making body at the central government level in determining pandemic control measures to prevent or control the further transmission of category one infectious disease. The Minister of the Ministry of Health and Wealthy is designated as the Commander of the CECC. The Commander leads a professional team comprising high-level disease control officials and renowned public health experts to determine appropriate COVID-19 response measures based on scientific judgments. The main task for the CECC determines national policy in response to COVID-19, such as health resources coordination, mandatory facemask wearing in public places, capacity restriction policy for supermarkets and shops, and social events restriction protocols. In addition, the isolation and contact tracing measures have been proved effective for preventing community transmission of the COVID-19. CDCA thus authorizes health authorities to issue and implement quarantine orders for infected patients in designated isolation care institutions.5 For those who fail to comply with quarantine orders or face mask-wearing rules, CDCA imposes a high fine for their unlawful acts.

In the early stage of the COVID-19 outbreak, there was a global shortage of Personal Protective Equipment (PPE) such as face masks and sanitizers.

In preventing the hoarding of these strategic resources from preventing COVID-19 transmission, CDCA authorizes the CECC Commander to determine whether to expropriate or requisite private land, products, buildings, devices, facilities, pharmaceuticals, and medical devices for disease control practices, facilities for the treatment of contamination, transportation means, and other designated disease control resources announced by the CECC Commander. CDCA also requires the government to provide adequate compensations to appropriate parties. In preventing the private parties from hoarding PPP, the CDCA provides CECC legal authority to hold individuals who collect resources that the competent authorities have already started to requisite for purposes of price speculation or to force up prices accountable. People violating the rule shall be sentenced to imprisonment from one year to seven years and may also be fined up to NT\$ 5 million. Due to the solid legal endorsement from CDCA allowing the government to secure a sufficient supply of PPE, the Ministry of Economic Affairs is thus responsible for coordinating with 30 Taiwanese machinery and automation companies to formulate the "National Facemask Production Team." The facemasks produced by the National Facemask Production Team have been all expropriated by the government to secure a sufficient supply of facemasks to all Taiwanese citizens. The government compensates participatory enterprises with fixed prices per one piece of the facemask which is a bit more than the usual sales price. The face mask policy has effectively reduced the production cycle of facemasks from two months to one week and enhanced the facemask production capacity to meet demand domestically. It is also notable that to ensure effective distribution of face masks to citizens, CECC issued an order restricting each person could only purchase a certain amount of face masks per week. In implementing the face mask purchase policy, the government developed the Name-Based Mask Distribution System using the National Health Insurance database already connected with local pharmacies. The Name-Based Mask Distribution System displayed the information concerning certain pharmacies' locations and their current stock of face masks. The system allows the Taiwanese people to purchase face masks efficiently with the help of digital technology. The sufficient supply of PPE had proved effective in preventing the community spread of COVID-19 in Taiwan until mid-May 2021.

#### SPECIAL ACT FOR PREVENTION, RELIEF, AND REVITALIZATION MEASURES FOR SEVERE PNEUMONIA WITH NOVEL PATHOGENS

Since Taiwan has not declared the State of Emergency, the existing legal framework such as the CDCA does not provide sufficient legal mandates for COVID-19 response. Therefore, the Special Act for Prevention, Relief and Revitalization Measures for Severe Pneumonia with Novel Pathogens (Special Act) promulgates on April 21, 2020, to effectively prevent and control the COVID-19 pandemic, protect the health of the people, and mitigate the economic impacts as a result for COVID-19 control measures. The Special Act first authorizes the Ministry of Health and Welfare a broader range of regulating and enforcement power to conduct various investigations and implement effective measures to prevent outbreaks of epidemics or to control further transmission.8 Several key features of the Special Act allow the CECC Commander to adopt appropriate and timely measures to control such high fatality and infectious disease.

The Special Act first criminalized those infected or suspected infectious individuals who fail to abide by the instructions issued by the competent health authorities at any level and thus are at risk of infecting others. They shall be sentenced to imprisonment for not more than two years or criminal detention and may additionally be imposed with a fine of no less than NT\$200,000 and no more than 2 million NT dollars. The degree of penalty has been raised under the Special Act by comparing to the CDCA. The Special Act imposes a criminal penalty for imprisonment for up to three years, unlawful detention, or a fine up to NT\$ 500,000.9 The Special Act also aims to strike the fake news that may result in public panic and creating chaos for the government in combating COVID-19 correctly. Taiwan has experienced numerous mock news instances disseminating on popular social media, such as spreading fake confirmed case numbers or whereabouts, and health measures announced by the government. The Special Act holds individuals, who disseminate rumors or false information regarding the epidemic conditions of severe pneumonia with novel pathogens and cause negative impacts on the public or others, accountable. The Special Act imposes a criminal penalty for individuals disseminating fake news by sentencing them to sentence for imprisonment for not more than three

years or illegal detention, or in lieu thereof or in addition to that, a fine of no more than 3 million NT dollars. However, the severe degree of the criminal penalty and administrative penalties against people who alleges noncompliance with executive orders issued by the CECC and disseminating fake news may make it difficult for law enforcement to draw a line between public interests and human rights.

In addition to increasing penalties for those behaviors endangering public health, another primary purpose for establishing the Special Act is to provide a legal mandate in establishing the economic subsidy scheme for those suffering from pandemic control measures or restriction policy. In supporting the sustained medical man-powers in combating the COVID-19, the Special Act authorizes the Ministry of Health and Welfare to provide subsidies or allowances to medical personnel engaged in disease prevention and control, medical services, and medical care private and public medical care (medical) institutions. 10 Moreover, the Special Act authorizes the government to provide subsidies for individuals assigned by a competent health authority of any level to home isolation, home quarantine, group isolation, or group quarantine, and family members who take leave or cannot work due to caring for isolated or quarantined individuals. In addition, a qualified person may apply for disease prevention compensation from the starting date to the isolation or quarantine.<sup>11</sup> For private sectors, the Special Act also provides legal mandates for the government to provide tax relief to enterprises, schools, legal entities, and organizations that pay employees' salaries during their leave period may deduct 200% of their salary payment from the taxable income tax in the current year.12 The Taiwanese government has initiated three-wave of massive subsidies for tourism, air transportation, recreational and food industry, including small and medium enterprises and unemployed individuals.

#### LEGAL CONTROVERSIES AND DISCUSSION

As discussed earlier, Taiwan has established a comprehensive legal framework providing strong legal mandates for the CECC Commander to adopt timely and effective pandemic control measures. The successful control of the Covid-19 pandemic is evident because Taiwan kept its world record for over 200 consecutive days of zero infectious cases. However, the practical regulatory approaches to tackle the urgent public health crisis may

result in legal controversies and constitutionality concerns. Furthermore, in the digital era, the wide application of digital technologies and data science makes the freedom or rights of people more vulnerable. This article identifies that excessive administrative intrusive measures may infringe privacy protection, freedom of speech, freedom of movement, and personal property rights. However, digital technologies require policy support and legal protection for privacy protection and other human rights.

#### **PRIVACY**

As discussed earlier, the Special Act authorizes CECC Commander may instruct appropriate personnel to record videos or photographs of the individual's violation of isolation or quarantine orders. The government is also authorized to publish their data or conduct other necessary disease prevention measures or actions to prevent the potential transmission of the virus. 13 The Special Act is thus alleged to be over empowering the government to collect and use personal information for pandemic control that may infringe citizens' privacy rights. Some argue that public authorities or government contractors may keep the personal data and utilize the data for other than pandemic control purposes. Privacy may also be infringed due to poor data security management or cyber-attack and eventually result in unintentional leakage. In response to these critics, the final version of the Special Act stipulates that any personal data gathered to control the transmission of the infectious disease applies to personal data protection regulation after the end of the epidemic.14

It is also notable that the Special Act authorizes the government to collect personal data such as tracing footprints, contact information, or private medical records without the restriction of the Person Data Protection Act and its related regulation. In practice, tracking contact information using the National Health Insurance data, personal mobile signals, and images taken by Closed-Circuit Television systems may be necessary to trace the contact history and have been proved successful in scoping potential infectious cases. Therefore, it is critical to develop detailed disclosure guidelines in publicizing the footprint information of contagious patients. Regarding the cyber security issues, there is an urgent need to establish cyber security regulations to prevent hackers from penetrating the NHI database that collects mass personal data

for COVID-19 response. In preventing the illegal use of personal data collected during the pandemic period, the Special Act stipulates that personal data protection law applies to any personal data collected during the pandemic period when it ends. An individual is also entitled to seek legal remedies.

Since the pandemic outbreak in Taiwan, the Taiwan government has taken a series of actions to contain the coronavirus while protecting privacy. Among all, the QR Code Registration System developed for trace tracking fulfills the regulations in the Special Act. The system functions by allowing the society to provide the location information to the government for pandemic control purposes. On the one hand, the citizen scans the QR code of the visited location and sends the text to the telecommunication companies, which will store the data for 28 days (two incubation periods). On the other hand, the government uses data to track the person who tested positive and their contact history and implement further pandemic prevention measures, such as disinfection of the area. Hence, the application of the QR Code Registration System provides privacy protection for people, allowing people to trust the government and be willing to provide the information. Although people in Taiwan are eager to cooperate with the QR Code of the visited places system, there are some concerns about handling information from other public authorities. For instance, there was an allegation from the courts accusing that some police departments use the information gathered from the QR Code of the visited places system to conduct the criminal investigation. The government soon promised to review the process and assure the public that any information gathers for pandemic control shall not be used for other public purposes. However, some citizen groups remain suspicious concerning handling personal data collected by the government for COVID-19 responses.

In the digital era, pandemic prevention and further national development will increasingly rely on digital technologies. However, digital technologies' effective and meaningful employment in governance lies in comprehensive data governance and policy support along with legal protection of privacy.

#### PROPORTIONALITY ISSUES

The Special Act provides an extremely high penalty for non-compliance with public health measures pronounced by the CECC or local health authorities. Individuals who fail to comply with pandemic control measures or quarantine orders may be subjected to high fines. Some commentators argue that covid-19 responses may sacrifice disadvantaged people's rights due to physical disabilities, lack of information channels, or disadvantaged social status. In Taiwan, law punishing many foreign workers is basically due to their difficulties in accessing accurate information concerning the latest COVID-19 control measures. A real case occurred in Taiwan in which a foreign worker designated at isolated resident places left the room for only eight seconds and ended up receiving a fine of 100,000NT dollars (approximate 3,300 USD). An infected individual who refuses to report or hides footprints when health authority collects contact tracing information could be fined up to 300,000NT Dollars (approximate hundred thousand USD).

The minimum fine and criminal penalty are set too high by law for noncompliance with CECC's orders. It might be practical to enforce pandemic control measures, but it also leaves no room for health authorities to consider proportionality. Moreover, it could eventually, in practice, result in a low informing rate for misdemeanors or not well-informed groups such as elderly or immigrant workers. This article thus suggests the amendment to the Special Act to reduce the minimum fine and establish more sophisticated law enforcement guidelines in determining the degree of penalty by categorizing the specific types for incompliance. Some commentators also argued that in any intrusive health emergency measures taken by the government, the government must conduct the assessment by taking into consideration its necessity, effectiveness, and scientific basis, in order to support the legality of such measure.

# THE NECESSITY OF ESTABLISHING NATIONAL EMERGENCY FRAMEWORK LEGISLATION

Although the Special Act provides a solid legal basis for the government to adopt effective and prompt actions in response to severe infectious disease, Taiwan nevertheless lacks essential framework legislation dealing with national emergency events such as large-scale natural disasters, contagious disease, riots, a variety of terrorist attacks. If the President chooses not to pronounce the emergency decrees authorized by the Constitution and the existing law is insufficient to respond to the

urgent crisis, the Special Legislation may thus be the last option. However, the establishment of special legislation is not a preferable approach because of the time-consuming and concerns of its constitutionality. For instance, the strike of fake news and highly restricted administrative actions on citizens' freedom requires essential framework legislation that responds to a wide range of national emergency events. Therefore, an intermediated legal arrangement between the State of Emergency and the establishment of Special Legislation aims at tackling specific emergencies shall be conducted. In this regard, this article suggests establishing the National Emergency Framework Legislation and an appropriate institutional arrangement in response to large-scale public health emergency events. Furthermore, this article suggests that the U.S. Federal Emergency Management Agency may be an ideal model approach to Taiwan's institutional framework in dealing with many unconventional security issues that provide the coordinated framework that deals with cross-agency and centrallocal government cooperation in responding to national emergency events.

#### CONCLUSION AND SUGGESTIONS

Following the Lowy Institute survey conducted in March 2021, a total of 98 countries were evaluated, based on the availability of data across the six indicators (confirmed cases; confirmed deaths; confirmed instances per million people; confirmed deaths per million people; confirmed cases as a proportion of test; tests per thousand people), Taiwan is ranked the third in the world. Strict public health measures, stringent and early border control measures and specific infected case tracing surveys were proven effective in reaching a relatively well containment of the COVID-19 pandemic from the outbreak of COVID-19 until late April 2021. The strict and effective pandemic control measures and vigorous enforcement may be somewhat workable in authoritarian and semi-authoritarian governments. On the other hand, Taiwan is a democratic and open society in terms of the political system. Theearly success experience in Taiwan relies on the comprehensive legal framework, highly trained public health officials, and citizen awareness for cooperation, such as wearing facemasks and implementing personal sanitation measures at public spaces.

The comprehensive legal framework, including the Special Act in responding to COVID-19, has provided strong and effective legal supports for government to enforce strict public health measures that potentially infringe citizen rights. However, President Tsai did not exercise her Constitutional vested right to declare an emergency decree in responding to the COVID-19 crisis, the smooth and speedy establishment of the Special Act implying full support from society. In this regard, Congress provides the government, specifically the Commanding Center for Epidemic, strong legal mandates to adopt effective pandemic control measures in preventing the outbreak of further transmission of COVID-19 disease. The establishment of the Special Act is the alternative to an emergency decree that could surpass specific existing laws such as privacy protection and due process for administrative investigation. However, challenges may arise after the pandemic ends.

The recent outbreak in Taiwan has resulted in an average of 400 confirmed cases daily, indicating three critical flaws for the COVID-19 safeguarding policy. First, Taiwan's early success in containing the virus provides the country with a safe period ofone and half years for the government to enhance the strategic resources in case of an outbreak. They are vaccines, testing, and hospitalization capacities. Second, the loose control for air transportation crews may be the direct cause of the spread of the virus. However, the complacent attitude in dealing with the sneaky virus may be the other important cause for the recent outbreak. Finally, it may not be too late for Taiwan to humbly learn from other country's experiences in controlling the pandemic.

However, new cases in Taiwan have fallen significantly from 535 daily on May 17 to an average of fewer than 10 in mid-September 2021. The key to suppressing this wave of community spread is nothing new but strengthening longstanding masking strategies, quarantine measures, contact tracing, border control measures, and provision of up-to-date pandemic control information around the clock by all significant public media. The recent pandemic control experience in containing the community spread has provided a valuable lesson for the Taiwanese government and people in Taiwan to learn from this experience knowingly the importance of maintaining high alert on pandemic prevention.

In the long run, further discussion for the precise definition of when a pandemic can be considered as to have ended may be required to offer clarification. Moreover, the capacity and willingness for the court to deal with petitions in the post-COVID-19 era require in-depth review to reduce long-term legal impacts. Specifically, safeguarding the citizens' rights and ensuring the constitutionality of government actions require more academic attention and further legal arrangement just like other similar unconventional security issues such as large-scale natural disasters, food security, terrorism, and cyberattacks.

#### **NOTES**

- <sup>1</sup> Constitution of the Republic of China, Second Amendment.
- Disaster Prevention and Protection have been amended nine times since its first enactment. Congress conducted a significant amendment involving 16 provisions in August 2010. The 2010 amendment aims to respond to another landslides centrosphere in the Kaohsiung area due to the Morakot typhoon that killed 681 people. Congress made the latest amendment in May 2019.
- International Covenant on Economic, Social and Cultural Rights (ICESCR) Art. 12; International Covenant on Civil and Political Rights (ICCPR) on the right to equal protection of the law, Art. 26.
- <sup>4</sup> Communicable Disease Control Act (CDCA), Art. 3.
- CDCA, Art. 44.
- 6 CDCA, Art. 54.
- ODCA Art. 61.
- 8 CDCA Art. 7.
- Special Act for Prevention, Relief and Revitalization Measures for Severe Pneumonia with Novel Pathogens (Special Act) Art. 13; CDCA, Art. 62.
- <sup>10</sup> Special Act Art. 2.
- Special Act Art. 2.
- 12 Special Act Art. 4.
- <sup>13</sup> Special Act Art. 8.
- Special Act Art. 8.

#### REFERENCES

- Anon. 2021. *Covid-19 Performance Index*. Lowy Institute. https://interactives.lowyinstitute.org/features/covid-performance/ [20 April 2021].
- Anon. 2021. Executive Yuan introduces a contact tracing text messaging service. *Executive Yuan*. 19 May. https://english.ey.gov.tw/Page/61BF20C3E89B856/efa00859-03c3-4349-82c7-4d1985da19c6 [15 June 2021].
- Anton Ming-Zhi Gao. 2015. The special reconstruction regime after extreme weather from the 2009 Morakot typhoon in Taiwan. *Carbon, and Climate Law Review* 9(1): 5-18.
- Aziz TuffiSaliba& Mariana Ferolla V. do Valle. 2020. Stranded for the border: An analysis of the legality of the international travel restriction adopted by states in the Covid-19 pandemic regarding the right to return to one's country. *Wisconsin International Law Journal* 38: 39-61.

- Chih-Wei Chen. 2021. Harnessing national digital power to prevent COVID-19: the case of Taiwan. *Geography Directions*. https://blog.geographydirections.com/2021/06/21/harnessing-national-digital-power-to-prevent-covid-19-the-case-of-taiwan/ [June 21, 2021].
- Cox, M. 2020. State of emergency and human rights during a pandemic: A Hungarian case study. *Human Right Brief* 24: 32-41.
- Greely, H.T.. 2020. COVID-19 Immunity Certificates: Science, Ethics, Policy, and Law. *Journal of Law and the Biosciences* 7(1): 1-29.
- Hille. 2021. Taiwan needs to switch gears to fight the first major Covid outbreak. *Financial Times*. June 6.
- Hsing- Hao Wu. 2016. A comparative legal study on East Asia disaster management law and policy: With particular reference to Korea, Japan, and Taiwan's experience. *Korea Legislative Research Institute Journal* 6(2): 146–182.
- Ming-JuiYeh& Yawen Cheng. 2020. Policies tackling the COVID-19 pandemic: A sociopolitical perspective from Taiwan. *Health Security* 18(6): 427-434.
- Neha Jain. 2020. Pandemic as Right Generators. *American Journal of International Law* 114: 677-686.
- Parmet, W.E. & Sinha, M.S. 2020. Covid-19 The Law and Limits of Quarantine. *The New England Journal of Medicine* 382(15): 28(1)-28(3).
- Parmet, W.E. 2018. Quarantining the Law of Quarantine: Why quarantine law does not reflect contemporary constitutional law. *Wake Forest J Law Policy* 9: 1-33.
- Rothstein, M.A. 2015. From SARS to Ebola: Legal and Ethical Considerations for Modern Quarantine. *Indiana Health Law Review* 12: 227, 246.
- Tifosi-Sutton, I. 2020. Human rights and Covid-19 responses: challenges, advantages, and unexpected. *Human Rights Brief.* 24: 18-31.

- Wang, Shih & Ko. 2009. Morakot: The aftermath: Officials agree: No state of emergency. *Taipei Times*. August 13.
- Wayne Soon. 2021. Why Taiwan is Beating COVID-19 Again. How did Taiwan suppress this wave, even as Australia, Vietnam, and Singapore are struggling with an uptick of the virus? *The Diplomat*, July 29.
- Wei-Ting Yeh. 2020. Taiwan's COVID-19 management: Developmental State, digital governance, and statesociety synergy. *Asian Politics & Policy* 12(3): 455-468
- Wiley, L.F. 2020. Public health law and science in the community mitigation strategy for Covid-19. *Journal of Law & the Biosciences* 7(1): 1-19.

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