Chapter 5 Mapping COVID-19 in Japan and Greater Tokyo Area, Socio-Spatial and Political Analysis of the Epidemic



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Abstract This chapter provides a political analysis of the COVID-19 crisis management in Japan completed by a socio-spatial analysis during the first three waves of the epidemic. Introducing the infectious diseases legal framework to pinpoint the key notion of "responsibility" allows us to understand coordination among political, scientific, and economic actors, and citizens, at national and local levels, allowing the implementation of various measures applied to each new wave. We then highlight tensions, power relations, and conflicts of interest, before concluding on Japanese relationship between freedom and security raised by the COVID-19 global pandemic.

Keywords Crisis management · Socio-spatial analysis · Epidemic · Infectious disease · Japan · COVID-19

1 Introduction

Japan is one of the few liberal democracies having an extremely low death rate, despite a high and early exposure to the SARS-Cov-2, due to its proximity with China (business travellers, tourists, etc.) combined with a theoretically structural vulnerability caused by the high concentration of its populations in megacities, where commuting travels are mixing millions of people every day, and a significant ageing population. On May 25, 2020, when the state of emergency was lifted, Japan

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 $^{^{1}}$ 34 million inhabitants for the megalopolis of Tokyo and 20 million for the megalopolis of Osaka.

² Shinjuku is the world biggest station in term of daily number of commuters (3.6 million), JR East, www.jreast.co.jp (last visited on March 4, 2021).

³ 28% of the population over the age of 65, half of whom, 14.7% of the population, are over the age of 75, Bureau National des Statistiques (www.stat.co.jp) (last visited on March 4, 2021).

had a total number of 846 deaths and 16,706 cumulative cases. With 13 cases per 100,000 inhabitants, Japan was then among the good students along with its Asian neighbours. On February 27, 2021, as the third wave appears to be coming to an end, Japan experienced 429,000 cumulative cases and 7865 deaths.⁴ The prevalence is 56.5 cases per 100,000 inhabitants. Moreover, the Japanese government did not use coercive measures or intrusive tracking of its population (except for people coming back from foreign countries).

However, analyses of Japanese crisis management do not all converge in the same direction, as critics pinpoint the national government's slow responsiveness, the entrenched bureaucracy and lack of transparency in the decision-making process. Indeed, public authorities face multi-sectoral and multi-level issues, such as health, economic, social, and political issues, intertwined at the local, national, and global levels. Besides the coordination between political and economic actors and citizens is challenged by the long duration of the epidemic and its rising socio-economic consequences.

In this chapter we propose to give an overview of the Japanese policy anchoring the Covid-19 epidemic⁶ in conjunction with a socio-spatial analysis. This highlights the main characteristics of the Japanese Covid-19 epidemic and its evolution in relation with public actions being pursued to prevent the spread of the virus.

1.1 Is Japan in Crisis Due to the COVID-19 Epidemic?

In Japan, the COVID-19 outbreak and its consequences fit only imperfectly with the definition of a crisis. For example, a crisis is defined as a significant threat to an organization that can have negative consequences if not handled properly (Coombs 2015). Although Japan did not experience the SARS and MERS epidemics, it has drawn lessons from older epidemics such as the Spanish flu to develop public policies on infectious diseases, including a surveillance system (Taniguchi et al. 2007). To respond to infectious diseases, public authorities can rely on alert systems, dedicated organizations to deal with well-known, already listed and anticipated threats to avoid further disruptions (Borraz et al. 2007). Nevertheless, as the literature highlights, crisis management plans are not always executed according to protocols due to political conflicts or economic interests; then, the nature of the response to the threat

⁴ MHLW (www.mhlw.go.jp/stf/covid-19/open-data.html) (last visited on March 4, 2021).

⁵ Shingata korona taiyô—minkan rinjichôsakai, chôsa-kenshô hôkokusho, ippandantaihôjin azia—pashifiku-inishiatibu, October 2020 (Novel coronavirus counter measures—civil society special survey, investigation report, Initiative Asia–Pacific, October 2020).

⁶ From the beginning of the epidemic, we did a regular survey of government publications, press, and media coverage. We also did a timeline of the COVID-19 epidemic in Japan on a dedicated website published by the IRFJ-MFJ: "Site d'information sur le Covid-19 au Japon par les chercheurs de l'IFRJ-MFJ". World Pandemic Research Network. WPRN-457952, 2020-06-09 at 06h37 (GMT): https://wprn.org/item/457952; http://covid19-ifrjmfj-tokyo1.e-monsite.com/blog/publications-officielles.html.

might become an additional risk. For example, in most countries, confusion between different public authorities, creation of ad hoc expertise and improvised coordination mechanisms, such as bypassing existing structures, lead to a blurring of boundaries and jurisdictional struggle that amplified the current crisis (Bergeron et al. 2020).

While the Japanese government was quick to recognize the seriousness of the warnings coming from China, introducing a graduated response, it nevertheless made decisions (or non-decisions) that triggered the crisis: the closure of schools, the late closure of borders, the state of emergency, the voluntary lockdown, to quote just a few. We then argue that it is not the virus itself but the political decisions that might have amplified the crisis in Japan.

Based on 't Hart and Boin's definition of a modern crisis, a crisis is not spatially confined by common boundaries, it entangles quickly with other deeply rooted problems, and its impact is long lasting and generates both a loss of reference, political confusion, as well as a leadership crisis ('t Hart and Boin 2003). Hence, the Japanese case meets these criteria. Additionally, the very use of the term "crisis" by political leaders can often be used as an opportunity to centralize power, opposing a consultative approach and decision-making process efficiency. However, effective crisis management does not always require the centralization of power, as such centralization displaces authority away from entitled actors, diminishing their ability to comply with political leaders' expectations rather than improving results.

Japanese policy anchoring the Covid-19 epidemic sheds light on a delicate balance between centralization and multi-level coordination on which depends the effectiveness of the coordination between political and economic actors and citizens.

2 Legal Framework and COVID-19 Countermeasures: Multi-level Policy and Three Pillars Coordination

The Communicable Disease Prevention Law enacted in 1898 has long provided the legal framework for infectious disease control in Japan. The basic policy was the traditional attempt to prevent the massive spread of infectious disease by notification and subsequent isolation and quarantine. Thus, mandatory reporting of national disease was the only system for infectious disease surveillance. In the 1990s, the circumstances surrounding infectious diseases changed drastically, such as globalization of travel and trade, animal diseases crossing into human populations, and accidental or deliberate release of biological agents (Taniguchi et al. 2007). In such circumstances, policies concerning infectious diseases were completely revised. The 1898 Infectious Disease Control Act was revised for the first time and the Law Concerning the Prevention of Infectious Diseases and Patients with Infectious Diseases (Infectious Diseases Law) was enacted in 1999 to emphasize the promotion of infectious disease prevention (Nomura et al. 2003).

This reform represents a turning point in Japanese infectious disease public policy. The new policy is based on the belief that there are basic countermeasures that are

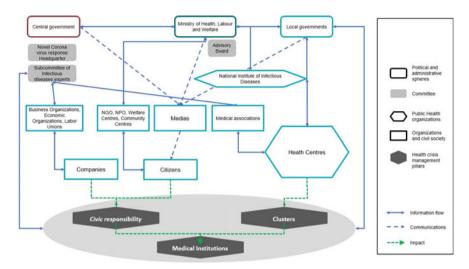


Fig. 1 Japanese COVID-19 epidemic political and sanitary counter-measures management coordination. *Source* Author

common to all types of infectious diseases, including the creation of an adequate surveillance system, which led to the formulation of a national strategy for fighting infectious diseases. In fact, the Japanese government chose to emphasize a more comprehensive approach and developed policy guidelines around eight pillars: (1) investigation of causes; (2) prevention of infection and further spread; (3) provision of medical care; (4) promotion of research and development; (5) participation in international networks; (6) respect for human rights; (7) provision of information and education; and (8) creation of new ties with relevant ministries, local governments, and non-governmental organizations (NGOs). This new law provides the legislative framework to a potential health crisis caused by infectious disease.

In 2012 an emergency system specifically designed for influenza was created based on the enactment of the Special Measures Act on New Influenza. It was revised on March 14, 2020 to add COVID-19. Under this Act, the Ministry of Health, Labour and Welfare, local governments, health centres and the National Institute of Infectious Diseases monitor and report on the outbreak of infectious diseases and coordinate their roles to prevent more infections (Umeda 2015). Japan also designated hospitals with special facilities to deal with patients who are infected with serious and highly infectious diseases. This multi-level infectious disease policy has been applied to respond to the COVID-19 outbreak and is articulated around three main pillars (see Fig. 1).⁷

⁷ Prime Minister Office of Government of Japan. Available at http://japan.kantei.go.jp/ongoingtopics/00013.html (last visited on February 12, 2020).

2.1 First Pillar: Medical and Health System

According to WHO reports, Japan's healthcare system ranks among the best in the world. In 2018, health expenditures accounted for 10.9% of GNP and life expectancy is one of the longest in the world, although it faces major issues such as an ageing population, rising chronic diseases, healthcare spending, and a lack of healthcare professionals and doctors (2.35 per 1 000 inhabitants). The number of beds, at 13.2 beds per 1000 inhabitants in 2015 is well above the OECD average; however only 0.2% (1841 beds) were reserved for infectious diseases (Sakamoto et al. 2018).

Since March, the Japanese government significantly increased the number of beds, enhanced intensive care responses via securing medical services system for severely ill patients, including medical equipment (ventilator, ECMO, etc.).

2.2 Second Pillar: Early Detection of and Early Response to Clusters—Epidemiological Investigations

In 1999, according to the new law, infectious disease surveillance was designated as one important component for disease control and was revised and incorporated as the national epidemiological surveillance for infectious diseases. The national and prefectural/municipal infectious disease surveillance centre was organized to play a central role in implementing surveillance and information dissemination (Taniguchi et al. 2007). Thus, identifying clusters through epidemiological surveys was the first phase of the policy to fight the Sars-Cov-2 (Tashiro and Shaw 2020). All physicians must inform the health centre (*hokenjo*) when a case of infectious disease is detected. The health centre then deploys contact tracing procedures. More than 500 health centres are present throughout the country, representing one of the major structures involved in public health management.

Rather than aiming at identifying and quarantining infected people, the main objective of epidemiological investigation is to determine factors behind the spread of the virus in order to rapidly apply targeted measures.

2.3 Third Pillar: Individual, Collective, and Civic Responsibility

According to article 4 of the Infectious Diseases Law, which defines civil society responsibilities, "the public must endeavor to acquire accurate knowledge on infectious diseases and to exercise vigilance in order to prevent infectious diseases." This is the legal basis for the third pillar, civic responsibility. This responsibility is based on the assumption that civil society and citizens have the necessary knowledge to contribute to the prevention of infectious disease propagation.

As mentioned above "provision of information and education" is one component of the new policy guidelines implemented in 1999 to prevent the spread of infectious diseases. For example, restrictions requested by the national government and local governors are relayed through regular risk communication via traditional media and social networks, encouraging individual and collective risk management. These "voluntary restrictions" (until early 2021) combine individual and collective responsibility into a civic responsibility (Sala 2020).

The social acceptance of the widespread wearing of masks' is also the result of successive epidemic episodes. Whereas in Europe and the United States surgical masks wearing was the subject of intense controversies, the practice gradually became widespread in Japan, from the Spanish flu (1918–1919), the Italian flu (1949–1950), the Hong Kong flu (1966–1968), SARS in 2003, and the swine flu in 2009, transforming the practice into a social norm. Since 2009 by protecting the individual and the community, the wearing of masks has been the subject of regular media information campaigns and corporate internal communication. This is also an illustration of the coordination between the state and economic actors in civic education and dissemination of behavioural norms: the wearing of masks has become a symbol of respect and responsibility among workers in the same way as hygiene rules (Burgess and Horii 2012).

This third pillar is activated at different levels according to the epidemic risk evolution from daily barrier gestures (wearing a surgical mask, hand washing, physical distance, not speaking loudly, etc.) to "voluntary restrictions" (staying home, closing schools, teleworking, closing shops, etc.). This is the highest level of civic responsibility as public authorities ask for citizens' acceptance without coercive measures.

While the Japanese government decided not to carry out systematic PCR tests due to technical constraints (lack of tests and qualified personnel), this has been partially remediated by a coordinated application of the three pillars in accordance with the legal framework and the national strategy to prevent infectious diseases (Tashiro and Shaw 2020).

3 Socio-Spatial and Political Approaches of the COVID-19 Counter-Measures

3.1 The First Wave—From January to End of May 2020: Mixed Political and Sanitary Responses

From early February 2020, clusters identification was the first priority. Mid-February preventive measures were implemented through recommendations for citizens, published on the websites of various ministries, such as basic hygiene rules (washing hands, sneezing and coughing into one's elbow, wearing a mask), and voluntary isolation in case of symptoms (including colds and flu). The government increased

hospitals capacities (number of beds) and specific care (respiratory assistance device equipment), with reinforced hospital structures dedicated exclusively to infectious diseases. On February 27, despite the lack of legal authority to do so, Prime Minister Shinzô Abe requested the closure of primary, middle, and high schools for two weeks. On February 28, the young governor of Hokkaido, Naomichi Suzuki, declared a local non-official "state of emergency" to halt the uncontrolled rise of the epidemic. Hokkaido Prefecture counted 63 cases out of 195 cases in Japan (32% of infections) with the largest daily increase (12 additional cases between February 27 and 28, 2020). The inhabitants were solemnly asked to voluntary lockdown. With a population of five million, Hokkaido had only 94 intensive care beds. Hokkaido was the first prefecture to implement a genuine attempt at lockdown without legal basis and might have been considered as a model to follow.

On the eve of a three-day weekend on March 19, the number of isolated cases imported from abroad increased in major cities (Tokyo, Osaka, Nagoya), worrying the members of the scientific advisory committee. ¹¹ The mayor of Kobe and the governor of Osaka called on citizens to limit their movements across prefectures, asking for voluntary lockdown. The same day, the Hokkaido governor announced the end of the three-week state of emergency in response to the drop in new cases numbers, ¹² while requesting continuation of the voluntary lockdown during weekends. ¹³

On March 25, the governor of Tokyo, Yuriko Koike, recommended to the inhabitants of the capital to limit outings and travel during the next weekend (gradual closure of many restaurants, karaoke bars, cinemas, and promotion of teleworking). The governors of Chiba, Saitama and Kanagawa prefectures asked citizens not to travel to Tokyo.

From end of March local governors called for an official declaration of a state of emergency. Yoshihide Suga, then Chief Cabinet Secretary, declared on March 31, that it was not yet necessary. However, on April 7, in response to hospitals congestion, increasing isolated cases, and a loss of overall control of the epidemic, the national government declared a state of emergency based on the March 14, 2020 amendment of

⁸ Despite a few cities, such as Kanazawa, that announced that they would not follow the recommendations, most public schools complied ("Despite Abe's request, some schools to remain open next week", *Asahi Shimbun*, February 28, 2020).

⁹ Hokkaido declares state of emergency over coronavirus, *Kyodo news*, February 28, 2020.

¹⁰ The contamination comes mainly from Chinese tourists, but not only, and if the main cluster was identified in Sapporo, another one was in Kitami, in the far east of the island ("Hokkaido grapples with coronavirus emergency", NHK, March 2, 2020).

¹¹ The prefectures of Osaka and Hyôgo—100 cases and 69 cases respectively, 0.67 contamination per 100,000 inhabitants, the same as Hokkaido, when Tokyo was still 0.26/100,000.

 $^{^{12}}$ After peaking at the end of February, with 15 new cases per day, no more cases are reported after March 17, 2020 in Hokkaido until June.

¹³ It turns out that residents have been following the calls for voluntary lockdown rather seriously: Asahi Shimbun, *Shinkorona vairusu no kansen jõkyõ* (Situation of contamination with new type of coronavirus), special statistical collection Covid19 online, www.asahi.com/special/corona/. Asahi Shimbun March 19, 2020, "New virus cases fall in Hokkaido; state of emergency to end".

¹⁴ "Abe, Suga flatly deny a state of emergency is imminent", Asahi Shimbun, March 31, 2020.

the Special Measures Act on New Influenza, allowing local governors to declare local states of emergency and take broader measures. Application of the state of emergency, together with a major economic plan to tackle the socio-economic consequences of the restrictions, allowed the government to proceed with the activation of civic responsibility to support the other two pillars.¹⁵

3.1.1 The First Wave Socio-Spatial Analysis

While at the individual level, the Japanese epidemic shares some common aspects with other countries, (particularly in age distribution, entry of contamination, and mortality of the elderly) at the socio-spatial level, the situation shows some specificities. Although we do not have access to infected people income, the spatial distribution leads us to hypothesize that the COVID-19 first wave affected mostly the higher-income level of the population. The patient's place of residence provides indeed an indicator of their social affiliation, and the mapping of the epidemic in June, on the scale of the Great Tokyo, thus brought back the historical socio-spatial dichotomy of the city (Fig. 2).

The first wave of contaminations happened in the most internationally exposed territories, followed by secondary regions, and finally the most closed and isolated areas. For example, Iwate prefecture did not record any case until July 29, 2020. The decline of new cases followed the same logic, namely a decrease from outside to central areas. During the first wave, Tokyo was the most affected area (139.7 cases per 100,000 inhabitants, followed by Okinawa with 131.5, and Osaka with 89.7). While the most populous ward (Setagaya-ku) registered the highest number of confirmed cases, Minato ward had, until June and the second wave, the highest proportional concentration of positive cases (Fig. 3). ¹⁶

In consequence, while the partial lockdown measures restricted white-collar workers from commuting to cities central areas, many blue-collar workers continued to work. Large groups, such as Toshiba or Sony, asked their office workers to stay at home, switching to telecommuting, but many factory workers still went to work. ¹⁷ Considering the spatial distribution of the first wave, the state of emergency, the goal of which was to reduce by 80% the commuting to big cities' central areas, achieved the expected outcome at the expense of individual liberties restriction, even at a moderate level compared to other liberal democratic states (Fig. 3).

¹⁵ The maximum number of cases per day was reached on April 12, with 743 cases recorded in one day (including 197 in Tokyo, 28% of total cases, followed by Fukuoka with 108 new cases), then a second peak on April 18, with 627 people recorded, 201 of them in Tokyo (32% of the total contaminations) and 70 in Chiba. The long-term decline in the number of cases took place from May 3, after the Golden Week. Then the downward trend set in at a steady rate of about 40 cases a day.

¹⁶ Nikkei Shinbun, *Châto de miru nihon no kansen jôkyô shingata koronawirusu* (The situation of the Covid-19 epidemic in Japan in graph), August 19, 2020.

¹⁷ "Thousands work from home as Sony and Takeda join telework", Nikkei Asia, February 19, 2020.

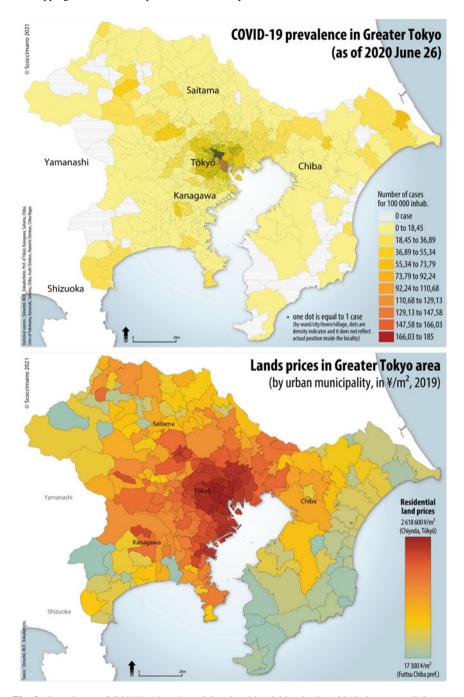


Fig. 2 Prevalence of COVID-19 on June 26 and residential land price (2019) in greater Tokyo



Fig. 3 Tokyo Hypercentral District of Ginza (above), April 15. The banks of the Tama River in Setagaya ward (below), April 29, 2020, public holiday, during the "voluntary lockdown" ©Scoccimarro 2020

3.1.2 Policy Decision-Making Centralization, Conflict of Interests, and Lack of Coordination: The COVID-19 Political Crisis

This first wave highlights mitigated political and sanitary responses. Early application of infectious diseases preventive and sanitary procedures in accordance with the legal framework allowed the activation of the surveillance system to investigate the causes and prevent the spread of the infection. For example, early March the results of these investigations, conducted also on the cruise ship *Diamond Princess*, allowed identifying key contagion vectors of the virus, summarized and communicated through the terms "san mitsu" or "three Cs", referring to closed places (*mippei*), crowded places (*misshû*) and places with close proximity between individuals (*missetsu*) (Oshitani et al. 2020). These scientific results were disseminated and used by public authorities in their risk communication. Information and education also allowed the activation of barrier gestures among Japanese citizens. But, although the health and medical system provided medical care, at the end of March, hospitals were not prepared and equipped enough to face the rising number of new contaminations. It would appear that the comprehensive infectious diseases countermeasures failed to contain the spread of the Sars-Cov-2 virus.

According to Olivier Borraz, analyzing the French government crisis management, it is not the virus itself but the decisions that provoked the crisis (Borraz 2021). Indeed, Boin and t'Hart (2003) highlight that it is up to the public authorities to define the nature of the crisis, its causes and consequences, and the organizations that will be responsible for it; in other words, to do the political work of framing it.

The first wave shows that despite an apparent multi-actor' coordination process, the Japanese government applied general measures, reflecting a lack of anticipation and comprehension of the virus diffusion factors and risk behaviours. For example, the closure of schools, whereas bars and restaurants as well as international borders were still opened, illustrates the limited efficiency of centrally issued policy directives. The closure of schools was considered as an arbitrary measure taken outside the framework of a state of emergency. It was not the result of any consultation with the Ministry of Health, Labour and Welfare, the Ministry of Education, local governments, and the expert advisory committee. The lack of structures sufficiently deployed upstream of this decision-making process to help families organize themselves, particularly through teleworking, reflects the lack of coordination between the political, administrative, business, and citizen spheres to enable the coherent application of the third pillar—civic responsibility. The repercussions of these measure on mental health, education, and work—life balance were also significant (Yamamoto et al. 2020).

This measure illustrates differences between the common beliefs that decision-making process must be centralized whereas crisis-response efforts strongly depend on many people in several networks ('t Hart et al. 1993). As Benini (1999) points out,

¹⁸ Sasaki, Asami et al. "Evidence-based tool for triggering school closures during influenza outbreaks, Japan." *Emerging infectious diseases* vol. 15, 11 (2009).

¹⁹ "Stay home" plan taking a toll on overburdened, lonely mothers, Asahi Shimbun, May 9, 2020.

efforts to radically centralize decision-making authority tend to cause more friction than they resolve because they disturb well-established authority patterns. Moreover, at the operational-response level, centralization is near impossible, because many dynamic, situation-specific, and urgent problems arise simultaneously at different places and nodes in the response (Boin and t'Hart 2003).

In mid-March, the decision to reopen schools despite the epidemic worsening situation (scientific advisory committee issued emergency recommendations), led to a new confusion in the preventive policy-making. This lack of policy consistency altered citizens' risk perception before the three days week-end for the spring equinox, during which the cherry blossoms attract a large number of people to public places, restaurants and bars every year. The poor risk communication from the national government contrasted with some local governors' reactivity (Hokkaido, Osaka, Wakayama) highlighting a lack of both consensual political framing of the crisis and shared risks level definition.

Finally, this first wave is characterized by a constant lag between the evolution of the epidemic and the political measures implemented by the national government leading to the state of emergency declaration and individual liberty restrictions. The national government has been slow to implement targeted measures corresponding to the identification of clusters, revealing the existence of a gap between the temporality of the virus and the temporality of public actions.

The successful decreasing number of new contaminations resulting from the voluntary lockdown highlights citizens' compliance with the government policies. Nevertheless, effectiveness of the coordination between political and economic actors and citizens is challenged by the long duration of the epidemic and its socio-economic consequences, specifically on lower income groups.

3.2 The Second Wave (from End of June to Mid-September): A Multi-level Coordination

After the lifting of the state of emergency and despite the coordination issues the then prime minister Shinzô Abe qualified the successful COVID-19 crisis management as a "Japanese model" highlighting the role of leadership in time of crisis. However, bureaucratic and political leaders' responses to effectively remediate the crisis were questioned and criticized. For example, the need to integrate socioeconomic players into a more transparent decision-making process led, early June, to a reconfiguration of the experts advisory committee into a subcommittee composed of half scientific and medical experts, and half economic and political actors. ²⁰ The new policy goal was to maintain economic activities along with COVID-19 preventive measures. This reinforced coordination between medical experts, public authorities, and economic actors, sheds light on experts' crucial role, not exclusively to

²⁰ Prime ministry secretary cabinet coronavirus headquarter, July 2, 2020; 40th committee, https://corona.go.jp/expert-meeting/pdf/sidai_r020703.pdf.

monitor the epidemic, but also to enable economic support measures application. For example, tourism, restaurants, and hotels—which represent one of the most affected sectors—are supported by the "Go to" campaign, which aims at stimulating consumption during the return to a "new normal" period. The campaign relied on a reinforced surveillance system, clusters identification, and information and educative provision to encourage civic responsibility. The launch of this campaign highlights the governmental choice to live with the virus rather than eradicate it.

3.2.1 Targeted Measures Application and Citizens' Compliance

As the first wave showed, the efficiency of public authorities' responses crucially depends on citizens' compliance with government policies. On June 12, the Diet voted the second supplementary budget to allow the government to implement substantial measures to protect the public, limit harm, and compensate damages. The amount was unprecedented both for a supplementary budget and in international comparison. This second budget was used in priority to support businesses through daily subsidies to maintain the jobs of employees whose activity was suspended, subsidies for the payment of rents, allowances for health personnel, financial support for about 400,000 university students to cover the loss of income, and financial measures implemented through public and private financial organizations. Although the Japanese economy is less impacted by the consequences of the epidemic than other countries, the effects of this policy are nuanced as shown by rising rates of unemployment, bankruptcy, and suicide (Ueda et al. 2020).

Since the end of June, the number of PCR tests increased significantly in response to new clusters identification in restaurants, bars, and night clubs located in specific areas (that is, Shinjuku, Tokyo). The government increased hotel capacity to quarantine tested positive individuals. Hospital capacity was also gradually increased to cope with the rise of confirmed cases (42,071 beds on August 21). This increase has kept the overall hospital occupancy rate relatively low during the second wave (27.4% on August 21).

On July 17, the Governor of Tokyo issued new guidelines to respond to the spread of the virus based on targetted measures for restaurants, bars, and nightlife venues. On August 7, the risk management policy was based on the articulation of five measures: rapid risk assessment, rapid identification of clusters, encouraging citizens' preventive behaviour based on the "3Cs", strengthening the capacity of health centres, and increasing the reception and care capacity of hospitals and hotels. On August 24, the number of contaminations started to decline. Between September 4 and 25, the downward trend in the number of new contaminations and hospitalizations continued along with the measures taken in high-risk locations such as restaurants

²¹ Advisory board, August 6, 2020; 5th committee, https://www.mhlw.go.jp/content/10900000/000 657598.pdf.

Experts Sub commission August 7, 2020, 5th committee) https://www.cas.go.jp/jp/seisaku/ful/bunkakai/corona5.pdf.

and bars (application of a curfew at 10 p.m. and reinforced vigilance with regard to customers (taking their temperature, wearing a mask, hydro-alcoholic solution, partitioning between tables, cooperation from customers to avoid talking out loud, etc.)).

From June to September, a multi-level policy was reinforced at the prefectural and municipal levels to respond to specific local issues by applying targeted measures. Unlike the WHO recommendations "test, test, test" (test, trace, isolate), this strategy of coordinating the three pillars allowed a better understanding of the virus and risk behaviours. Lessons learned from the first wave and its application through targeted measures allowed the government to avoid generalized restrictions of individual liberties, which have deleterious socio-economic impact on the population as experienced during the state of emergency voluntary lockdown (Yamamoto et al. 2020).

3.2.2 The Second Wave Socio-Spatial Analysis

In July, early clusters were identified mainly among young people (20–30 years old) in entertainment districts of major cities before spreading to other areas. On August 24, Shinjuku ward maintained the highest rate with 698.4 cases for 100,000 inhabitants, followed by Minato ward with only 367.7 cases and Shibuya ward with 302.8 cases (Fig. 4). Shinjuku ward has the highest daily number of positive cases (on August 24, 2438 cases were registered, followed by Setagaya ward, 1570 cases, and

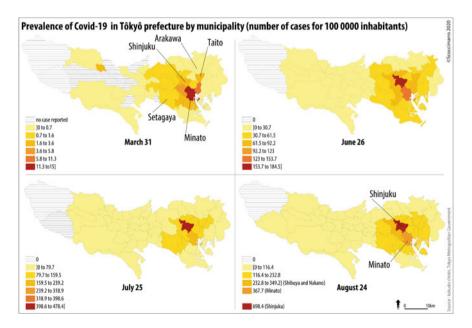


Fig. 4 The surge of case in Shinjuku Ward after second wave

Minato ward, 958 cases). In August the virus continued to spread with the higher rates in Shinjuku and the western upper side of the capital such as Shibuya and Nakano. Northern, eastern wards of Tokyo as well as the suburban towns and cities have a lower rate, under 120 cases for 100,000 inhabitants at the end of August (Fig. 4).

Shinjuku is very heterogeneous with Tokyo's second central business district, a residential area, as well as the red-light district of Kabukichô, adjoining the Shinjuku station, where bars, restaurants, hostess bars, and places for male and female prostitution are concentrated with little control by the police. Collecting clientele data to trace the routes of contamination is a difficult task; however it is within these populations that the authorities identified since June the largest increase in contamination, especially among young age groups. The second wave did call into question the socio-spatial distribution observed during the first wave. The second wave is endogenous, the population affected is more heterogeneous with a higher proportion of lower income than the first wave.

In this area social pressure tools and incentives for civic responsibility may have little influence. To overcome resistance towards testing and support health centre cluster tracking, a 100,000 yen subsidy might have prompted some of these populations to be tested; local authorities leveraged alternative collectivities tools to reduce the spread of the virus in those communities.

3.2.3 The Second Wave Efficient Targeted Measures: Actors Coordination at Community Level

During the second wave, PCR testing for at-risk population increased and risk communication improved. The media (traditional and government media) were used as an "intervention technology" on public policy targets identified through epidemiological investigations (Foucault 2004). Intermediary actors such as non-profit organizations (NPOs) and non-governmental organizations (NGOs) were also used to disseminate information to communities that the media and public authorities can hardly sensitize. The activation of these intermediary groups to target hard-to-reach populations was based on early 2000s experience acquired during HIV prevention in areas such as Shinjuku 2-chôme. For example, NGOs and community centres members established interpersonal relationships and social ties with local gay communities to build trust. This lay the social foundation for NGOs' local operations in coordination with municipalities and local actors.

The second wave is characterized by the individual citizen construction as rational and capable of self-vigilance committed to developing self-reflective skills (Levay 2009). From the end of the state of emergency, preventive measures crystallize on this ideal type of autonomous and self-vigilant individual. For example, the Tokyo governor maintained a high risk-awareness by setting-up a "Tokyo Alert" system, which consisted in colouring the rainbow bridge in red when the level of contamination reached a high level. It then mechanically activates a crisis protocol that would be integrated by each citizen individually (voluntary restrictions on travels, outings, working from home, etc.). The same ideal type was used by Prime Minister

Suga through his campaign slogan (jijyô—kyûjyô—kojyô—self-help, social solidarity care, and government care). These three levels—individual, community, and government—are coordinated to sustain economic activities, hence preserving the general interest. The civic responsibility pillar might support a liberal policy based on the representation of an autonomous citizen, who cannot be prohibited from carrying out behaviours that he considers to be part of his free will (Berlivet 2004). Thus, it is not so much the protection of individual liberties that determines public actions, but the preservation even at a moderate level of economic activity. Indeed, the Japanese company-ism structure is based on the economic activity of the social agents on which also depends the structure of the family, social relations, and financial resources (Dore 1990). Containing at a moderate level the economic consequences of the current epidemic represents a major condition for maintaining the compromise between freedom and security on which the Japanese crisis policy is based.

More generally, the gap between citizens' expectations and leadership efforts in preventing and containing crises characterizes the "risk society" (Beck 1992). The COVID-19 pandemic undermines the central roles of the democratic state, which are the protection of civil liberties (freedom of expression, right to privacy, right to assembly, free movement, etc.) and the provision of public good. It dramatically interrogates how citizens view the trade-offs between civil liberties and improved public health conditions. The different ways that government can be responsive to the preferences of the citizenry crucially depend on the compliance with the policies they implemented and the degree to which citizens agree with such policies. According to a recent survey, the citizens of Japan and the US tend to be the least willing to sacrifice civil liberties in exchange for improved public health conditions (Alsan et al. 2020). In comparison with other liberal democracies, the Japanese government applied a lesser level of individual liberties restrictions despite the state of emergency declaration. So, to what extent did the successful decreasing number of new contaminations during each wave highlight citizens' compliance with the government policies?²² Considering that a polarization between social groups, due to unequal impact of the epidemic (economic, social, health, etc.), alter the social acceptance of restrictive measures, the national government's application of a significant economic programme to support the voluntary lockdown might also have positively influenced citizens' compliance. Nevertheless, the effectiveness of the coordination between political and economic actors and citizens is challenged by the long duration of the epidemic and its socio-economic consequences, bearing also mental and physical health degradation.

²² Cato S, Iida T, Ishida K, McElwain KM, Shoji M (2020) Social distancing as a public good under the COVID-19 pandemic, Public Health, 188, 51–53; Kenneth Mori McElwain, "Who Trusts the Government to Handle COVID-19? Evidence from Panel Surveys in Japan", Lunch Seminar on Japanese Economy and Society organized by the IFRJ-MFJ, May 21, 2021. www.mfj.gr.jp/agenda/2021/05/21/mcelwain/.

3.3 The Third Wave (Mid-October to Early January): A New Paradigm?

At the end of September, following the two epidemic waves and with the aim of launching the "Go to" campaign throughout the country, the national government focused efforts on entertainment districts by dedicating working groups composed of experts, professional and regional public organizations on risk behavior and social dynamics analysis. Those working groups produced an increasingly precise level of knowledge about the "collective logic of discrimination", which is a crucial barrier for people to be tested.²³

At the end of October, an increase in new cases of contamination was first observed in the northern regions and in Okinawa. This trend highlighted and brought to the knowledge of public authorities by the advisory sub commission could be explained by the high level of contamination in the entertainment districts of large cities such as Minami Osaka, Sukino Sapporo, Kabukicho Shinjuku, Sakae Nagoya, Nakasu Fukuoka, combined with inter-regional travels increase.²⁴ Clusters among young people, foreign communities, and asymptomatic were difficult to target using standard communication tools (press, media) and public authorities communication campaign. Therefore, following the second wave experience, coordinated measures at the community level between NGOs and local public authorities were deployed. Mid-November, several members of the experts' sub commission stressed the need to implement measures at the national level supported by more targetted and educational risk communication. Three crisis factors were then mentioned by experts: the lack of effective communication and the difficulty to access high-risk groups; the increase of clusters difficult to identify (people with asymptomatic or weak symptoms); the delicate and difficult balance between the application of measures to prevent the spread of the virus and the support of economic activities. Thus, experts of the sub commission published the following recommendations to the public authorities early at the start of the third wave: limitation of the business hours for restaurants and bars for three weeks, suspending the "Go to travel" and "Go to eat" campaigns, shifting the calendar of end-of-year and early-year vacations, strengthening capacities of the surveillance system, health centres, and health facilities; encouraging changes in people's behaviour (work, going out, daily life). At the end of December, in response to the spike of the epidemic, experts stressed the urgent need for strong leadership from both local and national government.²⁵

²³ Working group, September 29, 2020 https://www.cas.go.jp/jp/seisaku/ful/kanrakugai_wg_2.pdf; Working group, October 13, 2020 https://www.cas.go.jp/jp/seisaku/ful/kanrakugai_wg_3_gaiyou.pdf; Working group, October 27, 2020 https://www.cas.go.jp/jp/seisaku/ful/kanrakugai_wg_4_gaiyou.pdf.

²⁴ Advisory Board, October 28, 2020, 12th committee) https://www.mhlw.go.jp/content/10900000/000688923.pdf; Experts sub commission, October 29, 2020, 13th committee, https://www.cas.go.jp/jp/seisaku/ful/bunkakai/corona13.pdf.

²⁵ Advisory board, December 22, 2020, 19th committee, https://www.mhlw.go.jp/content/109 00000/000709103.pdf; Experts Sub commission, December 23, 2020,19th committee, https://www.cas.go.jp/jp/sejsaku/ful/bunkakai/corona19.pdf.

The second declaration of the state of emergency on January 7, 2021, reveals an apparent lack of multi-level coordination and a delayed application of experts' recommendations. The gap between the temporality of the epidemic and national government actions might have altered citizens' risk perception, recalling the first wave mechanisms. The revision of the Special Measures Act on New Influenza to introduce sanctions for non-compliance with government measures, such as closing restaurants from 8 p.m., transforms the principle of voluntary restraints into a coercive measure. This marks a turning point in Japanese COVID-19 political crisis management. Incorporating a legal constraint reveals a paradigm shift in crisis management that might highlight the government's weak political leadership.

3.3.1 The Third Wave Socio-Spatial Analysis

Mapping the third wave shows some changes in the types of localities in which the virus is spreading. Previous waves had a concentric pattern centred on the city centres and upper classes residential districts. The dynamics of the third wave change this pattern both nationally and regionally (see Fig. 5).

The highest growth rates in the per capita ratio were in the outlying prefectures of the archipelago: Kôchi, Akita, Tottori, and Iwate (the last prefecture contaminated by the virus in July). The most urban prefectures were thus the least affected by the acceleration of the epidemic if we consider the period from November 10 to December 15, but also December to January (Fig. 5). These prefectures had exceptionally low rates showing a kind of regularization (Fig. 6). However, the situation changed between November and January, contamination rates decreased in prefectures where it had increased sharply during the first part of the third wave: Akita, Kochi, Hiroshima, or Iwate. During the third wave suburbs had the highest growth rates in the per capita ratio (up to 1000%), while megacities situation did not improve, with already higher rates in the per capita ratio, and with a steady raising number of cases (200% for Tokyo). The most affected prefectures remain the same, while the dynamics were different. The epidemic was spreading to the periphery, both nationally and regionally, as can be seen in the greater Tokyo area where the prefectures of Chiba, Saitama, and Kanagawa had a stronger evolution of their prevalence rate.

In this context, the "Go to" campaign, which promoted local tourism with subsidies for accommodation, restaurants, and shopping from July 22, and from October 1 for the inhabitants of Tokyo, was debated as being a factor of the third wave epidemic dynamic. In the face of increased contamination in the outlying territories, the programme was abruptly suspended on December 15.

The epidemic continued to progress in the central districts but at a much slower rate than in the municipalities on the outskirts, in the west of Tokyo and in Saitama (Fig. 7). While prevalence rate increased by more than 100% in some areas, the district of Shinjuku had less than 30% increase between November and December. Thus, the virus circulated more actively in residential areas and affected diverse type of populations within different structures (for example, households, nurseries, hospitals, elderly care institutions, workplaces).

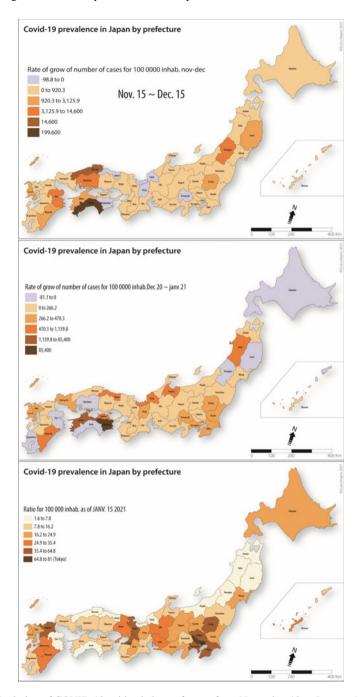
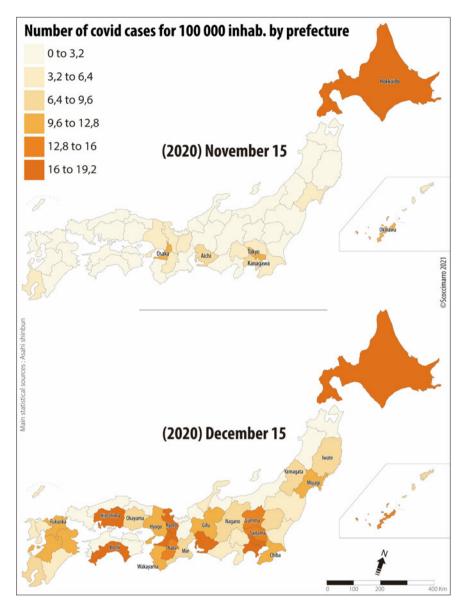


Fig. 5 Evolution of COVID-19 epidemic by prefecture from November 10 to January 15



 $\textbf{Fig. 6} \quad \text{Comparison of COVID-19 prevalence by prefecture between November 15 and December 15}$

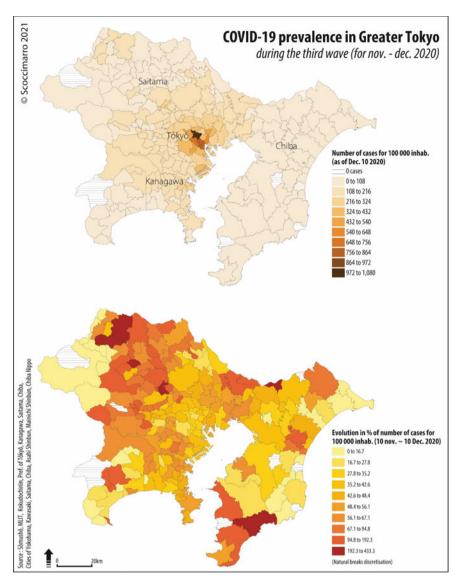


Fig. 7 Evolution of COVID-19 prevalence by municipality in Greater Tokyo Area from November 10 to December 10

As shown in Fig. 8, despite higher and rapid growth of prevalence rates in suburban municipalities from December to January (up to +191.4% in Akiruno city, +37% only for Shinjuku ward) this rate was rather low compared to central districts such as Shibuya (1050 cases for 100,000 inhabitants), Minato (1163 cases for 100,000 inhabitants), and Shinjuku (1480 cases for 100,000 inhabitants). Therefore, the overall Japanese spatial distribution of COVID-19 cases was not modified by the third wave.

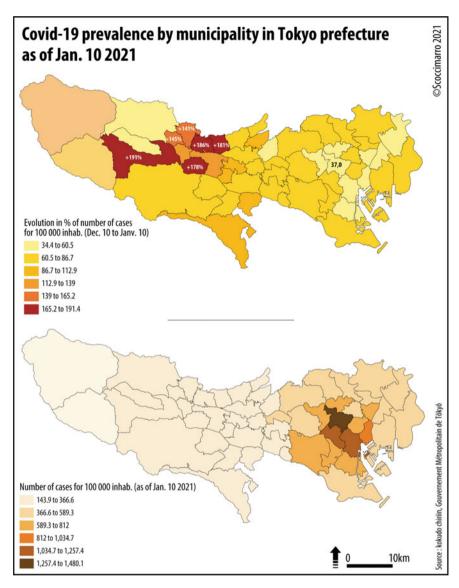


Fig. 8 Evolution of COVID-19 prevalence by municipality (ku-shi-chô-son) in Tokyo prefecture from November 10 to December 10

4 Conclusion

The low mortality rate until the end of August reflected a relatively effective management of the current epidemic by international comparison. However, it is difficult to define a Japanese model, especially since local situations are remarkably diverse due

to the great leeway of the prefectures, headed by governors who have broad prerogatives. The local authorities seem to have been the most effective and responsive in the epidemic management, hence sometimes generating confrontation with the national government. Social control and some form of regulation through fear reinforced by social discrimination are powerful levers that arouse social criticism but can lead to the application of preventive measures recommended by the authorities.

Thus, Japan was applying partial but sustainable lockdown supported by a major economic recovery plan. Social acceptance and civic responsibility allow for continuity in coordination with the other two pillars. However, the third wave challenged this equilibrium. If local authorities managed the second wave rather well, the third wave seemed more difficult to control. First of all, the expansion of the epidemic showed a general increase in prevalence, especially in the outlying territories. The "Go to" campaigns might have blurred the sense of urgency and might have played a role in the spread of the epidemic to prefectures far from urban centres, and the increase in prevalence in suburban municipalities. The counter-measures that had worked well in the summer appear to be less suited to these territories. However, the return of the state of emergency and the closure of restaurants and bars from 8 p.m. finally lowered the spread of the virus in the mid-term since there was a decrease in daily cases at the national level from January 10. At the end of February, the level of daily cases was brought back to the level of November.

References

Alsan M, Braghieri L, Eichmeyer S, Kim MJ, Stantcheva S, Yang DY (2020) Civil liberties in Times of Crisis NBER working paper 27972

Beck U (1992) Risk society: towards a new modernity (Trans. by Ritter M). Sage Publications, London

Benini Aldo A (1999) Network without Centre? A case study of an organizational network responding to an earthquake. J Contingencies Crisis Manag 7(1):38–47

Bergeron H, Borraz O, Castel P, Dedieu F (2020) Covid-19: une crise organisationnelle. Presses de Sciences Po, Paris

Berlivet L (2004) Une biopolitique de l'éducation pour la santé. La fabrique des campagnes de prévention. In: Fassin D, Memmi D (eds) Le Gouvernement des corps. Éditions de l'EHESS, Paris, pp 37–74

Boin A, Hart P (2003) Public leadership in Times of Crisis. Public Adm Rev 63(5):544–553

Borraz O (2021) Olivier Borraz on the Covid-19 Pandemic, interview. SASE, 23 February 2021. https://sase.org/news/pandemic-dossier/olivier-borraz-on-the-covid-19-pandemic/. Last visited on 4 March 2021

Borraz O, Gimbert V, Torny D (2007) Regards sur la sécurité sanitaire en France. Horizons Stratégiques 1(1):63–79

Burgess A, Mitsutoshi H (2012) Risk, ritual and health responsibilisation: Japan's "safety blanket" of surgical face mask-wearing. Sociol Health Illness 34(8)

Coombs WT (2015) Ongoing crisis communication: planning, managing, and responding, 4th edn. Sage, Thousand Oaks, CA

Dore R (1990) Japan: a nation made for corporatism? In: Crouch C, Dore R (eds) Corporatism and accountability: organized interests in British public life. Clarendon, Oxford, pp 45–62

Foucault M (2004) Naissance de la biopolitique. Cours au Collège de France 1978–1979. Gallimard, Paris

Levay C (2009) Technologies of self as a means of translation in an obesity intervention. In: Paper presented at the CSO-CNRS-Sciences Po, p 33

Nomura T, Takahashi H, Takeda Y (2003) Changes in measures against infectious disease in Japan and proposals for the future. J Japan Med Assoc 46(9):390–400

Oshitani H, Experts Members of The National COVID-19 Cluster Taskforce at Ministry of Health, Labour and Welfare, Japan (2020) Cluster-based approach to Coronavirus Disease 2019 (COVID-19) response in Japan-February–April 2020. Jpn J Infect Dis

Sala A (2020) Le Japon face à l'épidémie. Gestion de crise et responsabilité civique, La Vie des idées, ISSN 2105-3030. https://laviedesidees.fr/Le-Japon-face-a-l-epidemie.html

Shingata korona taiyô—minkan rinjichôsakai, chôsa-kenshô hôkokusho, ippandantaihôjin azia—pashifiku-inishiatibu, October 2020 (Novel coronavirus counter measures—civil society special survey, investigation report, Initiative Asia-Pacific, October 2020)

Taniguchi K, Shigematsu M, Yasui Y, Tada Y et al (2007) Overview of infectious disease surveillance system in Japan, 1999–2005. J Epidemiol 17

Tashiro A, Shaw R (2020) COVID-19 pandemic response in Japan: what is behind the initial flattening of the curve? Sustainability 12(13):5250

't Hart P, Rosenthal U, Kouzmin A (1993) Crisis decisionmaking: the centralization thesis revisited. Adm Soc 25(1):12–41

Ueda M, Matsubayashi T, Nordström R (2020) Suicide and mental health during the Covid-19 pandemic in Japan. medRxiv 2020.10.06.20207530

Umeda S (2015) Japan legal responses to health emergencies. Library of Congress www.loc.gov/law/help/health-emergencies/japan.php#_ftnref77. Last visited on 30 January 2021

Sakamoto H et al (2018) Japan health system review. Health Syst Trans 8(12018)

Yamamoto T, Uchiumi C, Suzuki N, Yoshimoto J, Murillo-Rodriguez E (2020) The psychological impact of 'mild lockdown' in Japan during the COVID-19 pandemic: a nationwide survey under a declared state of emergency. Int J Environ Res Public Health. https://doi.org/10.3390/ijerph172 49382

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