Topics: Recent topics in public health in Japan 2019

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Challenges and action on environmental health for the Tokyo Olympic Games and Paralympic Games in 2020

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Abstract

For the Tokyo Olympic Games and Paralympic Games in 2020, the Ministry of Health, Labour and Welfare of Japan is working on various public health issues. Among them, this paper picks up three topics: secondhand smoke measures, securing food safety and supervising the private lodging business, and reviewing the present conditions, challenges and countermeasures. We also present some of our research works related to those subjects.

For the Tokyo 2020 Games, the Health Promotion Act was revised and the Tokyo Metropolitan Government passed the Smoking Prevention Ordinance in 2018. The laws have strong restrictions to prevent unhealthy effects by secondhand smoke. However, Japan has a large sales volume of heated tobacco products that are difficult to handle with the law.

Regarding food services, the "Basic Strategy for Food and Beverage Services at the Tokyo 2020 Games" was formulated. As countermeasures against the hazards of food security, the following matters are shown: compliance, voluntary hygiene control, cooperation with administrative organs, food defense, and cooperation with targets of food and beverage services.

Private lodging (*minpaku* in Japanese) has spread rapidly in the past several years. It has been promoted by the government as promoting tourism, regional activation, and effective utilization of vacant houses. The Private Lodging Business Act came into force in June 2018 for disseminating proper *minpaku* under certain rules. There are three types of *minpaku*: with permission under the Inns and Hotels Act, with authorization of the National Strategic Special Zones Act, and registered under the Private Lodging Business Act. At the moment, the Private Lodging Business Act does not contain sufficient rules regarding securing public health.

It is necessary to conduct research to accumulate evidence gradually for health impact assessment and to contribute to public health policy for the success of the Tokyo 2020 Games.

keywords: Tokyo Olympic Games and Paralympic Games, food safety, prevention of secondhand smoke, private lodging (*minpaku*), public health

(accepted for publication, 21st January 2019)

actions have been taking by the Ministry of Health, Labour and Welfare of Japan[1].

- NBC (nuclear, biological, chemical material) counterterrorism
- · General improvements for accepting foreign patients
- \cdot Promotion of heat measures for athletes and spectators

The Tokyo Olympic Games and Paralympic Games will

be held in 2020 (hereinafter referred to as "Tokyo 2020

Games"). To achieve the security and relief of athletes and

spectators gathering from all over the world, the following

I. Introduction

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- · Promotion of the prevention of secondhand smoke
- Countermeasures for the shortage of accommodations (supervision of the private lodging business)
- · Infectious disease measures
- \cdot Quarantine inspection system, food poisoning measures
- \cdot Drug and dangerous drug measures
- Securing accessibility
- · Social participation support for people with disabilities

Of these, this paper picks up three subjects: prevention of secondhand smoke, food safety and supervision of the private lodging business, and reporting present conditions and challenges on these matters from viewpoint of environmental health hygiene that the National Institute of Public Health is working on as a research theme.

II. Prevention of secondhand smoke

The World Health Organization (WHO) and the International Olympic Committee signed an agreement to improve healthy lifestyles for a Tobacco Free Olympic Games in 2010[2]. "A Guide to Tobacco-Free Mega Events" not only covers secondhand smoke but also measures to realize a comprehensive tobacco-free environment by promotion as well as banning tobacco, sponsorship activities, and vending machines[3]. The differences between a tobacco-free event and a smoke-free event are defined in this guideline[3].

Smoke-free event:

- · 100% smoke-free environment
- Tobacco-free event: more comprehensive than a smoke-free event
- · 100% smoke-free environment
- Banning all tobacco advertising, promotion, and sponsorship
- Banning sales of tobacco products or related tobacco products within the event site or the area of its control
- · Informing, educating, and training the public
- · Absolutely no links with the tobacco industry in any form

Tobacco use causes more than 7 million deaths each year worldwide[4]. More than 6 million smokers die and 890,000 secondhand smokers die[4]. In Japan, 120,000 to 130,000 smokers die and 15,000 secondhand smokers die[5,6]. Smoking, the cause of death, can be prevented. According to the National Health and Nutrition Survey of 2017, the smoking prevalence in Japan is 18.8%, with males at 30.6% and females at 7.7%[7]. Smoking prevalence among males in their 30s and 40s was especially high, at 39.7% and 39.6%, respectively[7]. The reduction of smoking preva-

lence among male smokers is a problem in Japan. The place where secondhand smoke is occurring is eating and drinking establishments (42.4%) and workplaces (30.1%)[7]. In past Olympic Games, tobacco control has been implemented based on the guidelines, and the same level of tobacco control is expected at the Tokyo 2020 Games.

For the Tokyo 2020 Games, the Health Promotion Act was revised on July 18, 2018, and the Tokyo Metropolitan Government passed the Smoking Prevention Ordinance on June 27, 2018[8,9]. These laws have strong restrictions to prevent unhealthy effects from secondhand smoke. Since the World Health Organization concluded the Framework Convention on Tobacco Control (WHO FCTC) in 2005, Japan has been working on several tobacco control measures. However, "Protection from exposure to tobacco smoke" in article 8 of the FCTC was evaluated as the lowest level (up to two public places completely smoke-free). Revision to these laws will only increase the situation one rank (three to five public places completely smoke-free). In the past, Japanese smokers were able to smoke in restaurants, cafés, pubs, and bars. Many restaurants in Japan adopt bun-en systems. Bun-en means dividing the space into a smoking area and a nonsmoking area. This system makes it difficult to prevent secondhand smoke. Managers are resistant to a smoke-free system, worried about a drop in restaurant sales, despite the fact that many of the reports done so far indicate that restaurants sales are not declining.

The revised Health Promotion Act eliminates undesirable secondhand smoke and takes into account secondhand smoke countermeasures for each type of facility and its location, paying particular attention to children and patients, who have larger health impacts from secondhand smoke. Table 1 shows the conditions of the revised Health Promotion Act and the Tokyo Secondhand smoke Ordinance. The percentage of nonsmoking restaurants is 45% nationwide in the case of the Health Promotion Act[8]. Tokyo's secondhand smoke prevention ordinance covers 84% in Tokyo[9]. The Health Promotion Act plans to gradually increase nonsmoking restaurants because all new restaurants will be nonsmoking[8].

This time, heated tobacco products (HTPs) were difficult to handle in each of these laws. HTPs are tobacco products that allow smoking by directly or indirectly using an electric device[10]. Japan is a country with a comparatively large sales volume of HTPs. The reason is widely recognized by the introduction of the IQOS product on a famous TV show in Japan in 2016[11]. Furthermore, electronic cigarettes containing nicotine are hardly widespread because they need to be marketed as pharmaceuticals in Japan. Since the heating temperature of HTPs is controlled to be lower than the combustion temperature (500–900°C) of a cigaChallenges and action on environmental health for the Tokyo Olympic Games and Paralympic Games in 2020

Law Established		Health Promotion Act	Tokyo Metropolitan Government Smoking Prevention Ordinance
		18 July 2018	27 on June 2018
Public Space	kindergarten nursery school elementary school junior high school high school	No smoking on the premises (Smoking places could installed in places where mea- sures necessary to prevent secondhand smoke are taken	No smoking on the premises
	universities hospitals public administration	outdoors)	No smoking on the premises (Smoking places could installed in places where measures necessary to prevent secondhand smoke are taken outdoors.)
	indoor office workplaces not considered in any other category (such as factory) public transportation	In general no indoor smoking (smoking room could installed)	In general no indoor smoking (smoking room could installed)
	hotels	In general no indoor smoking	In general no indoor smoking
Restaurants	Large scale of facilities that serve mostly food and bevarage	(smoking room could installed. HTPs smokers could eat and drink in a smoking room, but cigarette smokers prohibit to eat and drink.)	(smoking room could installed. HTPs smokers could eat and drink in a smoking room, but cigarette smoker prohibit to eat and drink.)
	small scale of facilities that serve mostly food and bevarage	Smoking is possible if the following conditions are satis- fied.	In general no indoor smoking Only eating and drinking establishments that do not have employees (only restarants that are operated by families who live together) can be accesstable to smoking if a sign is posted.
		1. The capital does not exceed 50 million yen, the floor area of 100 square meters or less	
		2. For all facilities, smoking area are not allowed for cus- tomers and employees under the age of 20.	
	Percentage of no indoor smoking stores	45% (in Japan)	84% (in Tokyo)
Administrative penalty		Administrator's fine is up to 500,000 yen.	Administrator's fine is up to 50,000 yen.
		Smoker's fine is up to 300,000 yen.	Smoker's fine is up to 30,000 yen.

Table 1 Comparison of secondhand smoke countermeasures of the Health Promotion Act and the Tokyo Me	etropoli-
tan Government Smoking Prevention Ordinance	

Source: Reference [8, 9]

rette, the generation of harmful chemical substances is also suppressed[10,12]. Currently, three types of heated cigarettes-IQOS, Glo, and Ploom Tech-are sold in Japan's tobacco products market. These products are manufactured by Philip Morris International, British American Tobacco, and Japan Tobacco, respectively. In the tobacco industry, HTPs promote consumers to accept that the health impact of secondhand smoke is lower than from cigarettes. Recently, some restaurants in Japan allow only the use of HTPs. In the research reports on heated tobacco, many articles from the tobacco industry selling heated tobacco have been published[10,12], and there are few presentations by public health agencies at present[13]. The National Institute of Public Health in Japan continues to analyze harmful chemical substances generated from HTPs and has already made several reports[14,15]. According to these, the amount of nicotine in mainstream smoke was close to that of heated tobacco. 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK), N-Nitrosonornicotine (NNN), formaldehyde, and 1,3-butadiene were quantified from mainstream smoke. These compounds have been classified as Group 1 carcinogens by the International Agency for Research on Cancer (IARC) and are carcinogenic to humans. Although the analysis results for harmful chemical substances were reduced compared to cigarettes, carcinogenic substances were confirmed, and the number of components did not drastically decrease. Recently, St. Helen et al. reported that 58 constituents were lower in IQOS HTP components compared with mainstream smoke of a reference cigarette[16]. However, 56 constituents in IQOS mainstream smoke were higher than cigarettes[16]. For the harmful compounds they contain and health effects caused by secondhand smoke in HTPs, it is necessary to conduct research, and it is desirable to accumulate evidence for a health impact assessment.

III. Food safety

During the Olympic Games and the Paralympic Games, the number of stakeholders to which eating and drinking services are offered are expected to be 8 million people at the former and 2.4 million people at the latter[17]. Therefore, even though it is a sports competition, preparation becomes very big. First of all, "The Basic Spectrum Plan for the Olympic and Paralympic Games[18]" has been created. In the plan, 52 functional areas that specify various activities and operations required for the events are set up, and each activity and operation is clarified. Regarding "Food and Beverage (FNB)" included therein, the mission is to "Develop and implement plans necessary to meet the needs of each client group for sustainable food and beverage services during the Tokyo 2020 Games and ensure excellent quality. In addition, showcase the high quality of Japanese food as a legacy of the Tokyo 2020 Games, while providing diversity and harmony of food and beverages with tastes from the world." The plan referred to there is "Basic Strategy for Food and Beverage Services[17]".

This was formulated from the past London games[19] and the Rio games[20] as well. In this "Basic Strategy for Food and Beverage Services at the Tokyo 2020 Games[17]", the following description is a target.

"Tokyo 2020 aims to provide food and beverage services that enable athletes participating in the Tokyo 2020 Games to maintain good condition and perform to the peak of their abilities. To achieve this goal, Tokyo 2020 will be engaged in the following four activities before and during the Tokyo 2020 Games, which will contribute to further progress in Japan's food industry even after the Games." The four points are as follows.

1. Tokyo 2020 will provide food and beverage services that take into full consideration issues regarding food hygiene, nutrition, sustainability, and so on at the Tokyo 2020 Games with the aim of improving the capacity of services so that it is able to respond to large-scale food and beverage provision, production, and distribution.

2. Concerning food safety, as the Tokyo 2020 Games are to be held in midsummer, Tokyo 2020 will take a series of well-considered measures to prevent food poisoning. In addition, it will also promote other measures, including raising the Games' food safety standards to international standards.

3. Concerning sustainability, in addition to the credibility already established with the process of food provision from production through consumption, Tokyo 2020 will promote the globalization of certification systems and other measures. It will also promote environmental measures, including controlling food waste.

4. The Tokyo 2020 Games will serve as a wonderful opportunity for Japanese people to reacknowledge and disseminate the merits of their food culture. Tokyo 2020 seeks to provide hospitality with Japanese food in an acceptable way for overseas nationals, taking diverse food cultures into account.

Of these, the first two points are management matters that adequately control food safety and quality at the direct Olympic and Paralympic Games. The third point shows that the Olympic Charter[21] says "to encourage and support a responsible concern for environmental issues, to promote sustainable development in sport." The fourth point is a matter showing efforts from a unique perspective on Japanese food culture.

In addition, as specific matters regarding food safety, four points that require attention are cited[17]. The first point is the complexity of the supply chain. This is an ordinary matter considering the current food distribution system, and in particular because Japan relies on imported food for 60% of its necessary food, it is a matter to keep in mind at all times. However, it is expected that the distribution volume and range related to the second point will expand with the Olympic Games. Then there is a concern that the distribution channel may be overloaded by a larger quantity of food than before, and there may be some parts where management is insufficient in the supply chain.

However, as is said by the second point, there is concern that points will be insufficiently managed by expanding the distribution and scope of food products at the Olympic Games. Food safety is guaranteed by controlling temperature etc. appropriately at all stages of continuous distribution in the current food chain. Therefore, if management is insufficient even in part, there is the possibility that food poisoning may occur as a result. Especially considering that it will be carried out during the high summer, it is necessary to pay sufficient attention throughout the food chain.

The second point is about the magnitude of the provision of eating and drinking, which, as noted earlier, is a point to pay particular attention to. In the limited space of the Olympic and Paralympic venues, if cooking exceeding the permissible range is to be carried out, temperature control may be insufficient, cross-contamination may occur in finished food and raw materials, and even employee hygiene management may be worse. Therefore, it is necessary to determine the quantity that can be properly managed and to manage it so as not to exceed it.

The third point is the season in which the Tokyo 2020 Games are to be held. It is a hot and humid period of summer, suitable for the growth of microorganisms. However, looking at Japan's food poisoning statistics in recent years, food poisoning does not increase rapidly from July to August[22]. Meanwhile, since the main dining area at the athletes village provides food and drink on a 24-hour basis, if the temperature and time management of the food to be provided becomes insufficient, there is a high possibility that food poisoning will occur. Therefore, it is necessary to manage the temperature and time for reliable supply.

The fourth point is the existence of persons with malicious intent who may attempt to disrupt the successful operations of the Games. Even in Japan, it is thought that the number of factories that are taking measures to protect foods has been increasing since the incident of pesticides intentionally mixed into frozen foods, but it is not yet a general practice. Therefore, it becomes a matter that needs further strengthening from now.

The following matters are shown as countermeasures.

1. Compliance: Tokyo 2020 strictly complies with related laws and regulations, including the Food Sanitation Act, which was established to prevent sanitation hazards resulting from eating and drinking. It also ensures the traceability of food and beverages served at the Games from farm to table.

2. Voluntary hygiene control: It is fundamental that hy-

giene control be conducted by those who handle food to ensure food safety. Tokyo 2020 plans to adopt the Hazard Analysis and Critical Control Points (HACCP) system, the world standard for food hygiene control, and will request suppliers to comply with the HACCP system to the fullest possible extent to control food hygiene and prevent food poisoning. In addition, Tokyo 2020 will promote cooperation among related contractors to ensure that temperature controls of foodstuffs and cooked foods are continuously and vigorously implemented at all stages, from farm to table.

3. Cooperation with administrative organs: Acquiring the support of administrative organs can make a major difference in encouraging the implementation of voluntary hygiene control measures. Tokyo 2020 has established good relationships with administrative organs such as health centers under whose jurisdiction Games venues are to receive appropriate instruction, advice, and support.

4. Food defense: With the cooperation of administrative organs, Tokyo 2020 aims to enhance food safety measures for those who handle food materials, and develop measures to prevent and respond to risks caused by people with malicious intent.

5. Cooperation with targets of food and beverage services: In securing food safety, consumers play an important role. Therefore, Tokyo 2020 will provide consumers with all necessary information concerning important activities to secure food safety—for example, encouraging hand-washing and raising awareness of carrying food for a long period of time. It will also establish a cooperative relationship with targets of food and beverage services through mutual communication, for example, soliciting their opinions and disseminating information on the safety of provided food and beverages.

It seems that these are general matters that can be taken as measures concerning food safety against the above-mentioned problems. Since the HACCP system is hygiene control focusing on management against the hazards that cause food poisoning, it is especially effective because it clearly clarifies which points need to be managed in cooking and processing of food.

Also, providing a large amount of food and drink on a 24hour basis may lead unexpectedly to insufficient sanitation management. Therefore, mutual communication that accepts opinions from people who offer food and drink may be effective in preventing accidents.

Japan is a country made up of islands and surrounded by the sea. Also, as forests occupy most of the land, there is little cultivated land suitable for agriculture. In our opinion, it seems that unique efforts were made to secure foods even at times of poor resources by effectively using limited resources. For that reason, we generally made effective use of what seemed to be hard to eat, or made processed foods that could be preserved for a long time by fermenting ingredients using microorganisms. Furthermore, by making various seasonings, we have devised measures to eat various foods deliciously. The efforts are designated as intangible cultural heritage[23], and Japanese food typified by *umami* is accepted by many foreigners. It seems that efforts to exploit scarce natural resources and to make delicious use of foods that other people do not eat have developed current Japanese food. We hope that more people can safely enjoy this unique food culture with the Tokyo 2020 Games.

IV. Supervision of the private lodging business

The number of foreign tourists who visit to Japan surpassed 10 million people a year in 2013 and broke through 30 million in 2018. The Japanese government aims to accept 40 million foreign visitors in 2020[24]. Approximately 18 million are an upward fluctuation compared to the trend before the decision on the Tokyo 2020 Games[25]. Therefore, a shortage of the number of guest rooms is predicted by expansion of demand with the increase of foreign visitors[26].

On the other hand, in recent years, there has been rapid development of businesses via the internet matching those who want to rent out a vacant room for a short period with those who hope to find accommodation. Those kinds of accommodation services, utilizing housing (all or part of condominiums, apartment houses, and detached houses), are called *minpaku* or "private lodging" in Japan.

Minpaku spread rapidly in the past several years. The Japanese government is promoting them from the view-point of promoting tourism, regional activation, and effective utilization of vacant houses. In Japan, the increase of vacant houses is a serious social problem. An accumulation of vacant houses that are not being properly managed might bring deterioration of the residential environment, such as collapse, fire, crime, illegal dumping of garbage, rats and other pests, offensive odors, and aggravation of the scene[27]. *Minpaku* is regarded as a good practice of effective utilization of vacant houses.

Since there are people conducting *minpaku* without approval, however, although they fall under the hotel business, which requires approval under the Inns and Hotels Act, it is necessary to handle these situations by setting rules, giving consideration to securing public health, such as preventing the spread of infectious diseases, and to prevent trouble with community residents.

Based on these issues, the Private Lodging Business Act (Act No. 65 of 2017) came into effect in June 2017 for disseminating proper *minpaku* under certain rules. After starting with the enforcement of the Private Lodging Business Act from June 2018, *minpaku* has been developed through one of following three methods[28]. (Table 2)

1. Obtain permission under the Inns and Hotels Act (Act No. 138 of 1948)

2. Obtain authorization under the National Strategic Special Zones Act (Act No. 107 of 2013) (Special Zone Private Lodging)

3. Register under the Private Lodging Business Act

At the moment, the Private Lodging Business Act does not contain sufficient rules regarding securing public health.

Since *minpaku* is the accommodation business utilizing houses, their locations, structures, plans, and facilities are different from those of hotels and inns that are constructed for accommodation business purposes.

From our survey in 2018[29], before the Private Lodging Business Act was enforced, at the district of Osaka City where many *minpaku* operate, it was clarified that the identification of the location of *minpaku* was difficult. The location of approximately 60 percent of *minpaku* posted on the Airbnb platform could be identified. The density of *minpaku* was high in certain districts, and spread in residential areas where hotels and inns are not permitted. Most of the *minpaku* identified were the "absent landlord" type.

The number of illegal *minpaku* is increasing after the enforcement of the Private Lodging Business Act. The development of organizational frameworks for disclosing illegal *minpaku* on the site will be required.

We also carried out on-site measurement of the indoor environment of *minpaku*[29]. The deterioration of the indoor environment by lack of a ventilation system was observed at many of them. In addition, problems of repairs for starting operations of accommodation business were found. For example, air-conditioner plumbing did not penetrate a wall, and it was furnished inadequately. Environmental

Inns and Hotels Act (Simple Lodging)	National Strategic Special Zones Act (portion related to Special Zone Private Lodging)	Private Lodging Business Act
Ministry of Health, Labour and Welfare (MHLW)	Cabinet Office (Ministry of Health, Labour and Welfare (MHLW))	Ministry of Land, Infrastructure, Transpor and Tourism (MLIT) Ministry of Health, Labour and Welfare (MHLW) Japan Tourism Agency
Permission	Authorization	Registration
Not available	Available (There may be restrictions for each register- ing municipality)	Available May be limited by ordinances
No limitation	Subject to 2-night/3-day stay or longer (The minimum days will be set forth in ordi- nances, but the annual maximum operation days are not set)	Annual number of days provided are within 180 days (Implementation term may be limited by ordinance)
Required	Required	Required
Not required	Not required	Not required
Minimum floor space required (33m ² . However, 3.3m ² /lodger, if less than 10 lodgers)	25m ² or more per room, in principle	
Measures on ventilation, day- light, illumination, dehumidifica- tion, cleanliness, etc.	Measures on ventilation, daylight, illumina- tion, dehumidification, cleanliness, etc. and provision of clean room upon the start of use	Measures on ventilation, dehumidification cleanliness, periodic cleaning, etc.
Required	Required Not required for facilities for 6-night/7-day stay or longer	Required Not required for facilities with small lodging room area where the house owner lives or the premises
Required	Required	Required Not required for facilities with small lodging room area where the house owner lives of the premises
Not required	Required (proper explanation to the neighboring resi- dents, system and method for appropriately responding to complaints and inquiries, and securing contact information)	Required (Obligation to provide explaination to Lodg ers, obligation to respond to complaints)
Not regulated	Not regulated	Regulated
	(Simple Lodging) Ministry of Health, Labour and Welfare (MHLW) Permission Not available No limitation Required Mot required Minimum floor space required (33m ² . However, 3.3m ² /lodger, if less than 10 lodgers) Measures on ventilation, day- light, illumination, dehumidifica- tion, cleanliness, etc. Required Required Not required	Inns and Hotels Act (Simple Lodging)(portion related to Special Zone Private Lodging)Ministry of Health, Labour and Welfare (MHLW)Cabinet Office (Ministry of Health, Labour and Welfare (MHLW))PermissionAuthorizationNot availableAvailable (There may be restrictions for each register- ing municipality)No limitationSubject to 2-night/3-day stay or longer (The minimum days will be set forth in ordi- nances, but the annual maximum operation days are not set)RequiredRequiredMot requiredNot requiredMinimum floor space required (33m². However, 3.3m²/lodger, if less than 10 lodgers)25m² or more per room, in principleMeasures on ventilation, day- light, illumination, dehumidifica- tion, cleanliness, etc.Measures on ventilation, day- provision of clean room upon the start of useRequiredRequiredNot required for facilities for 6-night/7-day stay or longerRequiredRequiredNot required for facilities for 6-night/7-day stay or longerNot requiredcasures on ventilation, day- provision of clean room upon the start of useRequiredRequiredNot required for facilities for 6-night/7-day stay or longerRequiredRequiredNot required for facilities for 6-night/7-day stay or longerNot requiredRequiredNot requiredRequiredRequiredRequiredNot required for facilities for 6-night/7-day stay or longerNot requiredRequiredNot requiredRequiredNot requiredRequired

Table 2 Comparison of three laws concerning minpaku

Source: Reference [28]

problems such as dead insects, the belongings of former guests, and leftover food in the refrigerator were often seen by insufficient cleaning and management.

From the survey of owners and managers of *minpaku*, it was found that most were conscious of daily cleaning and hygiene management, but few of them were conscious about preventing infectious diseases, methods of garbage disposal, and the disaster preparedness[29]. It is thought that infectious disease issues and disaster issues were put at low priority in daily management. They had no awareness of those risks and had a lack of information.

Of the 150 local authorities that handle the registration and supervision of environmental hygiene in tourist accommodation, one-third of the authorities set the ordinances or regulations for *minpaku*[30]. The purpose of the ordinances and regulation is to secure relief and security of the living environment of local inhabitants. With ordinances and regulations, local authorities limit the areas and number of days in which the operation of *minpaku* is available. Concrete methods and techniques more than the guidelines of the national government are not shown about hygiene management.

In London and Paris, where the Olympic Games and Paralympic Games were or will be held, private lodgings are also very popular and widespread. In London and Paris, the increase of private lodgings have a negative impact on the rental housing market, and it causes a shortage of affordable rental housing supply in some areas[31-35]. So far, in both cities, not much attention has been paid to hygiene management. In any case, it is said that Japan is the first runner to try to supervise private lodging for certain levels of hygiene management and secure public health.

Far more attention and more research about environmental health issues are needed to achieve a successful Tokyo 2020 Games.

Conflicts of Interest

The authors declare that there are no conflicts of interest regarding the publication of this article.

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2020年東京オリンピック・パラリンピックに向けた環境保健の課題と対策

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抄録

2020年に開催される東京オリンピック・パラリンピック競技大会(以下,東京2020大会)に向けて, 厚生労働省では,NBC(核・生物・化学物質)テロ対策,外国人患者受入環境整備,アスリート・ 観客の暑さ対策の推進,受動喫煙防止の推進,宿泊施設の不足解消に向けた対策,感染症対策,検疫 体制・食中毒対策,麻薬・危険ドラッグ対策,アクセシビリティの確保,障害者の社会参加支援など に取り組んでいる.本稿では,このうち,受動喫煙防止の推進,食の安全確保,宿泊施設の不足解消 に向けた対策(民泊サービス)の3つのトピックスを取り上げ,現状と課題および対策について概観 する.また,これらに関連して国立保健医療科学院が取り組んでいる研究活動について報告する.

東京2020大会に先立ち、2018年に健康増進法が改正された.また、東京都では、2018年に「東京都受 動喫煙防止条例」が制定された.これらの法律・条例は受動喫煙の健康影響を防ぐために強い規制を 定めている.しかし、日本では法律の規制が難しい加熱式たばこが大きな売上高を占めており、加熱 式たばこへの対応が課題となっている.

飲食の提供については、「東京2020大会における飲食提供に係る基本戦略」が策定され、食の安全 を脅かすリスクへの対策として、法令順守、自主的衛生管理、行政機関との協働、食品防御、飲食提 供対象者との協力といった取り組みが示されている.

宿泊施設については、民泊サービスが、観光振興や地域の活性化、空き家の有効活用などの観点から推進され、ここ数年で急速な広がりを見せている。2018年6月には、一定のルールのもとに適切な 民泊サービスの普及を図るため、住宅宿泊事業法が施行された.現在、民泊サービスには、旅館業法 の許可を得たもの、国家戦略特区法(特区民泊)の認定を得たもの、住宅宿泊事業法の届出を行った もの、の3種類がある.住宅宿泊事業法は、公衆衛生の確保という点では、まだ十分な規制内容を含 んでいるとはいえない.

東京2020大会の成功に向けて、さらなる研究を重ね、健康影響評価に関するエビデンスを蓄積し、 公衆衛生政策につなげていくことが求められている.

キーワード:東京オリンピック・パラリンピック、食の安全、受動喫煙対策、民泊、公衆衛生