



# **Preventing Spread of Coronavirus Disease 2019 (COVID-19) Guideline for Airports**

## **Third Edition**

In order to prevent and control spread of COVID-19 and to further refine the prevention and protection of medical staff working at airports and on-site emergency response measures, the third edition of the *Preventing Spread of Coronavirus Disease 2019 (COVID-19) Guideline for Airports Technical Guidance* is developed based on amendment of previous edition.

### **1. Temperature Screening**

Calibrated non-contact thermometers should be equipped in proper places at the departure and arrival areas of terminals, and passengers should be provided with necessary hand sanitizers and disinfection products.

All arriving and departing passengers should have their body temperatures taken, and quarantine areas for passengers with fever should be set up. Once passengers with fever are found, they should be required to wear facial masks, register personal information and their means of contact immediately. Medical departments of airports should be notified in a prompt manner for quarantine. Local health departments should also be informed, and supports should be given to them to take over the passengers concerned.

### **2. Infection Control Measures for Staff**

#### **2.1 Routine Measures**

One should wear surgical masks when the local epidemic risk is low, and wear medical protective masks (up to GB19083-2010 standard or equivalent) or particulate respirators (up to GB2626-2006 standard or equivalent) when the risk is high. Alcohol-based or hydrogen peroxide-based hand sanitizers should be distributed to staff for the cleaning and disinfection of their hands, and staff should wear gloves when necessary.

#### **2.2 Personal Protection When Handling Passengers with Fever**

One should wear disposable medical caps, surgical masks, gloves and disposable protective clothes. When treating secretions, excreta, and vomit that is potentially contagious, surgical masks (up to YY0469-2011 standard or equivalent) should be replaced with medical protective masks, with additional goggles and disposable shoe covers. When taking off personal protective equipment (PPE), the correct order of steps should be followed to prevent cross-infection. The removed PPE should be placed in medical wastes bags and be disposed of as medical wastes. Reusable goggles should be sterilized and dried every time after use. Goggles with anti-fogging film should avoid being wiped with disinfectant. Instead, it is recommended to be washed with water then exposed to close-range direct ultraviolet lighting for over 30 minutes in a room with no one in it.



### **3. PPE for Healthcare Worker at Airports**

Medical staff working at airports should wear work clothes, disposable work caps, disposable gloves, protective clothing, medical protective masks or facial masks of higher protective levels, protective face screens or goggles, work shoes or rubber boots, and waterproof shoe covers when carrying out emergency response or transferring confirmed, suspected, or ill passengers.

When dealing with or transferring normal passengers in emergency, it is suggested that one should wear disposable caps, surgical masks, and work clothes, and wear disposable rubber gloves when exposed to body fluids or blood.

### **4. Airport Ventilation**

The management of air-conditioning systems and natural ventilation control in public places such as terminals should be enhanced. Practical measures can be taken according to the structure and layout of terminals as well as local climate to improve air circulation. With moderate temperature, doors and windows can be opened; where air-conditioning systems are used, full fresh air operation mode can be started as appropriate, and exhaust system should be turned on to keep the air clean. Special channels or remote stands should be used for flights carrying ill passengers.

## **5. Hygiene Requirements for Security Inspection**

### **5.1 Protective Measures for Security Inspection Personnel**

#### **5.1.1 Basic Measures**

When security inspection personnel are on duty, surgical masks and unified work suits should be worn, and uniform caps or disposable medical caps, goggles, protective suits, and disposable rubber gloves, etc. should be equipped as needed. The correct order of wearing PPE should be disposable medical caps, surgical masks, protective suits or unified work clothes, goggles, and rubber gloves. When they are off-duty, the order of removing PPE should be hand disinfection, goggles, hand disinfection, protective suits (or work suits), gloves, facial masks, caps and hand disinfection. Attention should be paid to the following points:

- Hands should be disinfected before wearing PPE;
- Surgical masks should be changed every 4 hours;
- Caps should fully cover all hair, including shock hair on the hairline. Long hair should be fastened tightly on top the head and put into the cap, and the edges of caps should fit close to the sides of ears, and
- Protective equipment needs to be replaced immediately when exposed to passenger's blood, vomit and other potentially contagious body fluids;
- Reusable goggles should be promptly sterilized and dried after each use;
- Hands should not touch faces when taking off protective equipment;
- The removed disposable protective equipment should be put into medical wastes bags.



### 5.1.2 Enhanced Protective Measures

- Civil aviation security inspection personnel working at document verification posts should wear uniform caps or disposable medical caps, disposable rubber gloves, surgical masks or facial masks with higher protective levels (such as N95 facial masks), goggles or protective facial screens. It is suggested that isolation shields should be installed at document verification counters.
- Civil aviation security inspection personnel working at body searching posts should wear uniform caps or disposable medical caps, disposable rubber gloves, surgical masks or facial masks with higher protective levels (N95 facial masks equipped with priority), goggles or protective facial screens. Wearing protective suits or unified work uniforms should be based on the conditions of disease.
- For personnel working at document verification and body searching posts, their work uniforms should be subject to centralized high-temperature steam disinfection for 20 to 40 minutes or ultraviolet lighting for 1 to 2 hours when they are off duty for the day. 75% alcohol can be applied to wipe clothes when confirmed, suspected cases or passengers with suspicious symptoms are found, as well as when potentially contagious body fluids are treated in emergency. And disinfectant mats should be provided, or soles can be sprayed with disinfectant.

## 5.2 Hygiene Requirements for Security Inspection Areas

The management of air-conditioning systems and natural ventilation in security inspection areas should be enhanced to keep the air clean, and civil aviation security inspection aisles should be equipped with relevant facilities to enhance ventilation. During operation, key areas (document verification counters, baggage packing areas, security bins, hand-held metal detectors) and security screening facilities should be disinfected regularly, and hand disinfectant should be provided in screening aisles. After the daily operation, areas and facilities such as security inspection sites and trash bins should be wet-cleaned, and all-round disinfection needs to be performed to keep the environment clean.

## 6. Wastes Disposal

The management of wastes sorting and the collection of used masks should be enhanced so that wastes could be cleaned in time. The cleaning of wastes containers such as trash cans should be strengthened, and regular disinfection should be performed, either by spraying or wiping with 250 to 500mg/L chlorine disinfectant, or by disinfected wipes. When potentially contaminated wastes are found, related local departments should be promptly contacted in accordance with the *Regulations on Medical Wastes Management*.

## 7. Disinfection of Airport Public Areas

Disinfection of airport public areas should follow the *Guidelines for Prevention of Novel Coronavirus Infection in Public Places* and *Guide to Disinfection Techniques in Public Places* issued by National Health Commission.



## **7.1 Daily Preventative Cleaning and Disinfection**

Preventative cleaning and disinfection of public places in airports should be conducted on a daily basis. Conspicuous signs that show the daily disinfection should be put up, and the records of staff performing the disinfection tasks should be kept.

7.1.1 Air disinfection: use natural ventilation where conditions allow; air conditioning ventilation should be enhanced, and exhaust fans should be cleaned and disinfected once every month. 250 to 500mg/L chlorine disinfectant or 250mg/L chlorine dioxide spray could be applied for reaction no less than 30 minutes, and hydrogen peroxide spray with ultra-low concentration could be used in key areas. Ventilation is needed when disinfection is completed.

7.1.2 Surface disinfection: crowded places and high-touch surfaces (such as self check-in or check-in counters, document verification counters, buttons in elevators, and handrails) should be the focuses. 250 to 500mg/L chlorine disinfectant or 250mg/L chlorine dioxide spray could be used together when wiping.

## **7.2 Terminal Disinfection**

When suspected or confirmed cases, or passengers with suspicious symptoms are found in airports, terminal disinfection should be performed by professionals, using one of the following methods:

7.2.1 Hydrogen peroxide gas sterilization devices can be used for integrated disinfection of the air and the environment. The specific operation can be performed according to the equipment instruction manual.

7.2.2 0.5% peroxyacetic acid, 3% hydrogen peroxide, or 500mg/L chlorine dioxide can be adopted for air disinfection, by way of aerosol spray, and use 20ml/m<sup>3</sup>. Windows should be closed before disinfection, and spraying should start from up-down, and then from left to right. Windows can be opened for ventilation after 60 minutes of action. After spray disinfection, the surface of objects may be wiped (swept) in the way of daily disinfection.

7.2.3 For key areas that are contaminated, 1000 to 2000mg/L chlorine disinfectant can be applied by spraying or wiping for reaction of more than 30 minutes.

## **8. Methods of Psychological Self-Regulation for Front-line Personnel of Airports**

The front-line personnel can chose the following methods to protect themselves from psychological crisis and maintain a good mental health state.

### **8.1 Having a Good Understanding of Own Emotional Experience**

It is normal to have certain negative emotions during the epidemic, and these unusual emotions can in turn serve as a reminder to protect ourselves in a more timely and effective manner. Even if we find that we have some emotional experiences we don't familiar with, we needn't to be stressful. It is normal for us to have these psychological changes. If we allow these reactions to occur and accept what is happening, rather than deny and reject them, positive changes will naturally ensue.

Where our negative emotions cannot be relieved through self-regulation, resulting in extreme fear and anxiety, even affecting our sleep and diet, it's recommended to seek professional help.



## **8.2 Acquiring the Epidemic Information with a Proper Attitude**

The huge amount of information about the epidemic will leave us with a strong sense of anxiety and helplessness. We should avoid being influenced by emotionally charged information. We'd better to seek information from formal media and official websites, and never fall victim to certain rumors. Also, we should develop a proper plan on when to get information online, and in particular try to avoid exposure to influx of information at the time when we feel most fragile (such as right before bedtime). And last, we should avoid the vicarious trauma caused by information overload. We need to leave enough time for ourselves to listen our inner voice and be aware of our emotional changes. That can help us to turn panic into appropriate personal protection.

## **8.3 Friendly and Mutual Social Support**

Social connection can calm us down. Communicating with others is the most effective way to relief our stress. On the one hand, through frequent communication with family and friends by telephone and the Internet, we can encourage each other, share our feelings and reinforce mutual psychological support; on the other hand, by making contact with colleagues in similar situations, we can lend our ears to each other and renew our connections, in a bid to building a psychological anti-epidemic alliance.

## **8.4 Maintaining a Stable and Healthy Lifestyle**

Maintaining a regular working and resting schedule and having a sense of self-control are the good panacea for anxiety and panic. Although our ranges of activities are restricted, we still can take a positive look at life. We should, to the greatest extent possible, maintain our regular schedule and follow our usual daily routine, allowing us to return to our normal life. In addition, we should develop good living and hygiene habits, keep a healthy diet, have enough sleep, and never try to ease our tension through the use of tobacco and alcohol.

## **9. Proper Use of Personal Protective Equipment**

In order to provide guidance to front-line staff in civil aviation on how to correctly wear facial masks, hats, gloves, goggles and other protective equipment, our Office made videos, downloadable from the website [ams.caac.gov.cn](http://ams.caac.gov.cn) under Prevention and Control of Public Health Emergency.