

Annex 1

Technical Guidelines for the Prevention and Control of Coronavirus in Cold Chain Food Production and Operation

(Version Two)

1. Basis and scope of application

In order to standardize and guide the normal operation of cold chain food related units and employees during the normalization of the prevention and control of the new *corona pneumonia* epidemic, the main responsibility for the prevention and control of production and operation shall be implemented in accordance with the " *Guidelines for Epidemic Prevention and Control in Meat Processing*" issued by the State Council in response to the joint prevention and control mechanism of the new corona pneumonia epidemic (Zongfa [2020] No. 216 of Joint Prevention and Control Mechanism), Technical Guidelines for Prevention and Control of New Corona Pneumonia Epidemics in Agricultural Trade Market/Bazaar (Zongfa [2020] No. 223 of Joint Prevention and Control Mechanism), Coronavirus Pneumonia Prevention and Control Plan (Eighth Edition)" (Zongfa [2021] No. 51 of Joint Prevention and Control Mechanism), "Notice of the State Council's Joint Prevention and Control Mechanism for the the new corona virus Infection Pneumonia Epidemic on Strengthening the Prevention and Control of the New Corona Pneumonia Epidemic in Port Cities" (Guo Ban Fa Ming Dian [2021] No. 14),as well as relevant national food safety standards and the "Guidelines for Preventing the Spread of New Corona Pneumonia in Food Production and Operation (2021 August) and other documents issued by the Food and Agriculture Organization of the United Nations, and this guide is formulated for cold chain food producers/operators and key links in production and operation.

This guideline applies to the prevention and control of new coronavirus contamination in the production, loading and unloading, transportation, storage and sales of cold chain food processed by freezing, refrigeration and other methods, and the products are always in a low temperature state from delivery to sale. The business units and relevant practitioners of places where imported cold chain food is stored in the port area can refer to the implementation.

This guideline focuses on preventing cold chain food practitioners and related personnel from being infected by the new coronavirus, and highlights the epidemic prevention and control of high-risk personnel such as porters and box workers, who are engaged in key links such as loading, unloading, storage and transportation in key places, such as centralized supervision warehouses or first-station cold storage. Focus on strengthening the cleaning and disinfection of cold chain food packaging. Producers and operators strictly abide by the laws and regulations and relevant national food safety standards, and implement the regulations of the local competent authorities on the prevention and control of the new corona pneumonia epidemic are the prerequisites for the application of this guide.

2. Health management of new corona virus prevention and control for employees

The health of employees is fundamental to prevent cold chain food from being contaminated by the new coronavirus. Producers and operators involved in the production, loading and unloading, transportation, storage, sales and catering services of cold-chain food should adjust and update the health management system of employees timely in accordance with the requirements for the prevention and control of the new corona pneumonia epidemic, and improve the management measures for the prevention and control of the new corona virus, and strictly implement the personal protection of employees.

2.1 Establish a health registration system for employees

Cold chain food producers and operators must do a good job in registering the itinerary and health status of their employees (including new recruits and temporary workers) within 14 days, establish health cards for employees on duty, and grasp the flow and health of employees. Newly recruited employees need to provide a certificate of vaccination against the new coronavirus, a negative nucleic acid certificate within 48 hours, and no abnormality in the health code and itinerary code.

2.2 Daily health monitoring of employees

Cold chain food producers and operators should strengthen personnel entry and exit management and health monitoring, establish a health record (including 10 main symptoms: fever, dry cough, fatigue, odour and taste loss, nasal congestion, runny nose, sore throat, conjunctivitis, myalgia, diarrhea), and risk exposure information reporting system for all employees, set up temperature measurement points at the entrance of food production and operation areas, and implement registration, temperature measurement, disinfection, health codes check, and other prevention and control measures, implement the "green code" on-duty system.

2.3 Nucleic acid test of practitioners

Nucleic acid test is an important means for early detection of infected persons. Cold chain food practitioners should conduct relevant tests in accordance with the "Coronavirus Pneumonia Prevention and Control Plan (Eighth Edition)" (Joint Prevention and Control Mechanism Zongfa [2021] No. 51). For personnel in high-risk positions in key places and key links, the frequency of nucleic acid test should be appropriately increased.

Personnel in high-risk positions, including but are not limited to the following personnel: porters of centralized supervision warehouses or cold storage at the first station, loader, unpacker, sterilizer, forklift operator, warehouse management, sampling personnel, garbage cleaning personnel and the like in high-risk positions, who have direct contact with imported cold chain food without preventive disinfection for the first time. Front-end personnel of imported cold chain food production and processing enterprises, such as porters, unpackers, etc.

Personnel in high-risk positions should implement high-frequency nucleic acid testing, and the specific frequency can be appropriately adjusted based on risk research and judgment according to local conditions. In principle, reasonable arrangements should be made to ensure that nucleic acid testing is carried out for the same type of personnel every day.

2.4 Registration and management of outsiders

Minimize the entry of outsiders into the production and operation area. If it is really necessary to enter, it is necessary to register the unit, health status, and contact with people in the area where the epidemic occurred, and implement the inspection and registration of health codes and itinerary codes, temperature measurement, and personal protection (such as wear a mask, etc.) and other measures to enter. When the vehicle enters and exits, the personnel in the vehicle shall not leave the vehicle unless it is necessary, and those who do need to leave the vehicle shall be managed according to the above requirements. Doorman on duty, staff and drivers should avoid unnecessary contact.

2.5 Practitioners' hygiene requirements

2.5.1 Healthy employment. Before starting work, ensure that your health is in good condition, report health information to the production operator, and take the initiative to accept the temperature check of the production operator. If symptoms such as fever, dry cough, fatigue and the like occur, you should report it immediately and seek medical attention in time.

2.5.2 Take personal protection. Practitioners should wear masks, gloves and work clothes correctly during work. Work clothes should be kept clean and tidy, washed regularly and disinfected when necessary. In addition to work clothes, practitioners in special positions (fresh food slaughtering, dividing workshops, etc.) should wear waterproof aprons, rubber gloves and the like according to the protection requirements. It is recommended that food workers wear disposable gloves, but they must be replaced frequently, and they should wash their hands between changes and when they are not wearing gloves. To avoid secondary contamination of protective equipment, gloves must be replaced after non-food related activities (such as opening/closing the door by hand and emptying the trash can).

2.5.3 Pay attention to personal hygiene. When sneezing or coughing, cover your mouth and nose with a tissue or use your elbow arm. Do not spit, and pay attention to hygiene when blowing your nose. Try to avoid touching your mouth, eyes, and nose with your hands.

2.5.4 Strengthen hand hygiene. When handling goods, or when your hands touch shelves, handrails and other public objects, wash your hands with hand sanitizer or soap under running water, or rub your hands with quick-drying hand disinfectant.

2.6 Establish a health abnormality reporting procedure

Once an employee finds that he or the co-living person has suspected symptoms such as fever, cough, fatigue, etc., he should report it to the top management of production and operation in a timely manner, and report it level by level or directly as appropriate. Once a production operator finds that an employee has the above-mentioned abnormal health symptoms, no matter what the health status of the employee, they should take effective measures to quickly exclude the employee and their close contacts from the food work environment. In areas with a high risk of COVID-19 transmission, it is recommended to require healthy employees to make "zero reports" in accordance with the prevention and control regulations of the local competent authorities.

2.7 Procedures for returning employees to work

According to the registration and health files of the employees in the production and operation area, timely track the treatment and rehabilitation status of employees with abnormal health, physical discomfort, suspected or infected with the new corona virus (patients or asymptomatic infections), and scientifically evaluate whether they are eligible for return after recovery. If the symptoms of a confirmed case of new coronary pneumonia subside, and the two PCR nucleic acid tests at least 24 hours apart are negative, they can be released from isolation. Employees who are close contacts of new coronary pneumonia patients should also meet the above control requirements before returning to work.

2.8 Strengthen the promotion of prevention and control knowledge

Carry out various forms of health education, guide practitioners to master the knowledge and skills related to the prevention and treatment of new coronary pneumonia and other respiratory infectious diseases, develop good hygiene habits, and strengthen self-protection awareness

3. Prevention and control requirements during loading, unloading, storage and transportation

3.1 Sanitary requirements for loading and unloading workers

For those in high-risk positions, such as porters, loader, unloading workers, and sterilizers in centralized supervision warehouses or first-station cold storage, who have direct contact with imported cold chain food without preventive disinfection for the first time, the personnel are required to be fixed [same people], under closed-loop management, and carried out nucleic acid testing according to 2.3.

In addition to the general personal hygiene requirements, you should wear special work clothes and hats, disposable medical masks or disposable medical surgical masks, gloves, etc., and wear goggles and face screens when necessary to avoid frequent contact between the surface of the goods and the body surface.

Especially when loading and unloading imported cold chain food from areas with epidemic outbreaks, relevant personnel must wear masks in the whole process of handling the goods, to avoid the goods being close to the face, hands touching the nose and mouth, and direct contact with frozen aquatic products that may be contaminated by the new coronavirus. If the mask is damaged during transportation, it should be replaced immediately.

3.2 Hygienic requirements for transport drivers

In addition to fulfil self-protection in accordance with the health requirements of practitioners, the personnel (drivers and attendants) transporting cold chain foods shall not open the boxes without authorization during the transportation process, and shall not open the cold chain food packaging at will to directly contact the cold chain foods. When the vehicle enters and exits, the driver and attendants should avoid unnecessary contact with the guards on duty and staff.

3.3 Sanitary management at the source of goods

For imported cold chain food, importers or consignors should cooperate with relevant departments to sample and test the food and its packaging. For food from other cities, distributors should take the initiative to ask suppliers for relevant food safety and epidemic prevention testing information. If the importer or consignor entrusts a third-party logistics company to provide transportation, warehousing and other services, when the goods are delivered to the third-party logistics company, they should take the initiative to provide the third-party logistics company with the testing information required for food safety and epidemic prevention.

In the process of cold chain logistics, if a support or a liner needs to be installed in the logistics package, it should meet the relevant food safety and hygiene requirements. Logistics packaging should be marked.

In the process of cold chain logistics, if a support or a liner needs to be installed in the logistics package, it should meet the relevant food safety and hygiene requirements. The temperature conditions for cold chain food storage and transportation should be indicated on the logistics packaging. Strengthen the operation and management of cargo loading, unloading and handling, so that the cargo cannot directly touch the ground, and the cold chain food packaging cannot be opened at will. It should be ensured that the temperature of cold chain food is always within the allowable fluctuation range during transportation, storage, and sorting. Record and save the time, temperature and other information of each delivery link.

3.4 Hygienic management of vehicles

It should be ensured that the interior of the vehicle body is clean, non-toxic, harmless, odour free and pollution free, and preventive disinfection is carried out on a regular basis. For specific disinfection measures, please refer to the “Technical Guidelines for the Prevention and Control of Novel Coronavirus in Cold Chain Food Production and Operation (Second Edition)”.

3.5 Sanitary management of storage facilities

Strengthen the storage inspection, in addition to inspecting the appearance and quantity of the cold chain food, the core temperature of the cold chain food should also be inspected. Strengthen storage management in warehouses, and cold chain food stacking should be placed on trays or shelves as required. Cold-chain foods should be stored in separate warehouses or locations according to their characteristics. Cold-chain foods that require large differences in temperature and humidity and are prone to cross-contamination should not be mixed. Regularly clean and disinfect the internal environment of the warehouse, shelves, operating tools, etc. For specific cleaning and disinfection measures, please refer to the "Technical Guidelines for the Prevention and Control of Novel Coronavirus in the Production and Operation of Cold Chain Foods (Second Edition)".

4. Prevention and control requirements for production and processing

4.1 Personnel hygiene requirements

Follow the requirements of 2.5.

For the front-end personnel of imported cold chain food production and processing enterprises, such as porters, unpackers and other high-risk positions, the personnel are required to be fixed, under closed-loop management, and carried out nucleic acid testing according to 2.3.

4.2 Keep a safe distance

Keep a distance of at least 1 meter between employees. Feasible measures to maintain a distance in the food processing environment include setting up workbenches on one side of the production line, displacing production, or assembling baffles in the middle of the production line to prevent employees from facing each other; strictly limiting the number of employees in the food preparation area, excluding all non-essential personnel; dividing employees into working groups or teams while reducing communication and mutual influence between working groups.

4.3 Incoming goods protection and inspection

4.3.1 Loading and unloading protection. Loading and unloading workers who need to directly contact cold-chain food goods should wear work clothes, disposable medical masks or disposable medical surgical masks, gloves, and the like before moving the goods, and wear goggles and face screens when necessary to avoid frequent contact with the surface of the goods.

4.3.2 Source control. Cold chain food companies should do a good job in supplier compliance inspection and evaluation, carefully do a good job in the inspection of each batch of food purchases, and truthfully record and store food and raw material purchase inspections, factory inspections, food sales and other information in accordance with the law to ensure food traceability. The retention period of records and vouchers shall not be less than 6 months after the expiration of the product warranty period. If the warranty period is not clearly guaranteed, the retention period shall not be less than 2 years.

4.3.3 Inspection certificate. For imported cold chain food, the importer or consignor should cooperate with relevant departments to sample and test the food and its packaging. For food from other cities, distributors should take the initiative to ask suppliers for relevant food safety and epidemic prevention testing information.

4.4 Cleaning and disinfection

Refer to "Technical Guidelines for Prevention and Control of Novel Coronavirus in Cold Chain Food Production and Operation (Second Edition)."

4.5 Other protective measures

4.5.1 Ventilation requirements. Natural ventilation is preferred for ordinary factories, and mechanical ventilation can be supplemented if conditions are not available. The closed factory area shall maintain indoor air circulation and air supply safety of the air-conditioning system. Air conditioning and ventilation systems should be regularly inspected, cleaned and disinfected to ensure clean and safe operation.

4.5.2 Water supply and drainage facilities. There should be perfect sewers and kept unblocked. It should be equipped with ground flushing faucets and disinfection facilities for the flushing and disinfection of sewage. Sewage discharge shall comply with relevant regulations.

5. Requirements for prevention and control of sales operations

Cold chain food centralized trading markets (agricultural wholesale markets, farmers markets, community vegetable markets), supermarkets, convenience stores, catering, self-operated e-commerce and other food operators shall have corresponding refrigeration and freezing facilities.

5.1 Personnel hygiene requirements

Follow the requirements of 2.5. In addition to work clothes, food operators at special stalls such as fresh slaughter must wear waterproof aprons and rubber gloves.

5.2 Keep a safe distance

Reasonably control the number of customers entering the cold chain food sales area, avoid gathering and crowding, keep the distance between people at least 1 meter or more, and the enclosed space should be increased appropriately. Measures such as the use of floor markings to guide and manage orderly queues of customers can help customers maintain their distance, especially in crowded areas such as service and checkout counters.

5.3 Cleaning and disinfection

Refer to "Technical Guidelines for Prevention and Control of Novel Coronavirus in Cold Chain Food Production and Operation (Second Edition)."

5.4 Warning and notice

5.4.1 Set up signs at the entrance, requiring customers not to enter the store when they have abnormal health, physical discomfort, or suspected symptoms of the new coronavirus.

5.4.2 Regularly broadcast or post notices in cold chain food retail areas (shops, stores, supermarkets) to remind customers of keeping their distance and cleaning their hands in time. If consumers bring their own shopping bags, it is recommended that they should pay attention to cleaning before using them after containing cold chain food.

5.5 Other protective measures

Install glass barriers at checkouts and counters to encourage contactless payments to reduce contact. Consideration should be given to not publicly displaying or selling unpackaged cold chain foods at self-service counters.

6. Requirements for the prevention and control of catering processing

In order to prevent and control the new coronavirus pollution involving cold chain food and catering services, catering service operators should pay attention to the following prevention and control points:

6.1 Personnel hygiene requirements

Follow the requirements mentioned in 2.5.

6.2 Keep a safe distance

6.2.1 Use appropriate measures to prevent overcrowding, and keep a distance of at least 1 meter between food workers.

6.2.2 The dining seat arrangement should achieve a safe social distance.

6.2.3 Use floor markings in the store to help customers keep their distance, especially in crowded areas, such as service counters and cashier counters.

6.3 Cleaning and disinfection

Refer to "Technical Guidelines for Prevention and Control of Novel Coronavirus and disinfection in Cold Chain Food Production and Operation (Second Edition)."

6.4 Other protective measures

6.4.1 Provide cleaning and disinfectant. Provide hand sanitizer or no-wash disinfectant to employees and consumers entering and exiting food and beverage areas.

6.4.2 Prevent cross contamination. Raw and cooked foods are processed and stored separately, and the tools and utensils for handling uncooked foods shall be fully disinfected before serving or processing cooked foods.

6.4.3 Avoid unnecessary physical contact. Encourage mobile contactless payment, contactless delivery, etc.

6.4.4 Maintain air circulation, and frequently open windows for ventilation indoors.

6.4.5 Try to provide cooked food. During the epidemic, the food should be fully heated.

6.4.6 Catering services should promote the use of divided meals, and those who cannot divide meals should provide public spoons and chopsticks.

7. Emergency measures in relevant areas

Cold chain food producers and operators should formulate emergency response plans for the new corona pneumonia epidemic to deal with and report the epidemic situation in a timely manner and effectively prevent the spread of the new corona virus.

7.1 Emergency treatment of persons with abnormal health conditions

Once cases or persons with abnormal conditions suspected of new coronary pneumonia are found in areas related to the production and operation of cold chain food, prevention and control measures must be implemented to prevent internal proliferation and external export, and cooperate with relevant departments to carry out epidemiological investigations, close contact tracing management, and epidemic sites disinfection, etc. And conduct sampling and nucleic acid testing in the areas where the personnel work and appear as well as the cold chain food they process. If there is an air conditioning and ventilation system, it should be cleaned and disinfected at the same time, and it can be restarted after the evaluation is qualified.

According to the severity of the epidemic, temporarily close the work area and resume production after the epidemic is under control.

In accordance with the requirements for the prevention and control of the new coronary pneumonia epidemic, measures such as cutting off transmission routes and isolating close contacts should be taken, and pollutants should be disposed of according to regulations.

7.2 Emergency treatment for samples found to be positive for nucleic acid testing

Once notified of a positive sample for the nucleic acid test of the new coronavirus, cold chain food producers and operators should quickly activate their own emergency plans, and take emergency measures for relevant items and the environment in a timely manner according to local requirements and under the guidance of professionals. Temporarily seal up related items, cooperate with sampling, harmless treatment, disinfect the work area, and conduct nucleic acid testing and health screening for people who may come into contact with them in a timely manner. Before the items are processed, the refrigerators, freezers, cold storages and other refrigeration equipment should be kept in normal operation to prevent the items from spoiling and possibly spreading pollutants. When handling related items, avoid spills or leaks during transportation. Personnel involved in the removal and transportation of related items should strictly protect themselves.

For cold chain food that is positive for the new coronavirus nucleic acid, it shall be implemented in accordance with the relevant requirements for the classification and disposal of cold chain food for the prevention and control of the new coronary pneumonia epidemic.

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