

Technical Guidelines for Prevention and Control of New Coronavirus in Cold-chain Food Production and Operation
(Second Edition)

I. Scope of basis and application

In order to standardize and guide the normal-running units of cold-chain food and those employees in course of the regular epidemic prevention and control phase to implement the prevention and control responsibility of production and operation, referring to these following mentioned documents (“Guidelines for COVID19 Prevention and Control in Meat Processing Enterprises” (L.F.L.K.J.Z.Z.F.[2020]NO.216), “Technical Guidelines for COVID19 Prevention and Control in Agricultural Markets and Country Markets” (L.F.L.K.J.Z.Z.F.[2020]NO.223), “Scheme on COVID19 Prevention and Control (Eighth Edition)”(L.F.L.K.J.Z.Z.F.[2021]NO.51), “Notice on the reinforcement of COVID19 Prevention and Control in Port Cities issued by the COVID-19 Prevention and control Unit of the State Council” (G.B.F.M.D.[2021]NO.14), “Guidelines for COVID19 Prevention in food production and operation”(produced in August 2021) which was issued by the corresponding National food safety standards and the Food and Agriculture Organization of the United Nations, and other relevant documents), aiming at the manufacturers of cold-chain food and the key links of production and operation, and hence this Technical Guideline has been formulated.

This Guideline is applicable for the COVID19 prevention and control in various circles (such as producing, loading and unloading, transporting, storing and marketing etc.) of cold-chain food (processed by freezing, refrigerating or other similar means) which must be essential to keep under low-temperature status in course of the process from production to sale. It may be implemented in port regions by the operation units of storing cold-chain food (exported to China) and those practitioners working in the relevant field.

This Guideline focuses on preventing cold-chain food practitioners and related personnel from being infected by COVID19, highlighting the epidemic prevention and control of personnel (who is responsible for loading, unloading, storage and transportation, for example, porters and unpacking workers) working in the high-risk areas such as centralized supervision warehouses or cold storage at the first station, and paying attention to strengthening the cleaning and disinfection in the process of the cold-chain food packaging. Manufacturers shall strictly abide by the requirements of laws and regulations and relevant national food safety standards, and implement the regulations of COVID19 prevention and control stipulated by local authority, which is a prerequisite for the application of this Guideline.

II. COVID19 Prevention and Control for Practitioners

Practitioners’ health is the foundation to prevent cold chain food from COVID19 pollution. Manufacturers involved in cold chain food production, loading and unloading, transportation, storage, sales and catering services shall timely adjust and update the health management system of practitioners, improve the COVID19 prevention and control measures, and strictly do a good job in personal protection of practitioners according to the requirements of epidemic prevention and control.

2.1 Establish a health registration system for employees on duty

Cold chain food manufacturers should register the 14-day travel and health status of employees (including new employees and temporary employees), and establish health system for on-the-job employees. New employees should provide vaccination certificate, nucleic acid negative certificate being issued within 48 hours, no abnormalities in health code and travel code, and the movement and

health status of employees shall be always noted.

2.2 Daily health monitoring of employees

Cold chain food manufacturers should strengthen monitoring personnel access and health. The following systems shall be established for all employees, which includes health system (including 10 main symptoms: fever, dry cough, fatigue, decreased sense of smell and taste, stuffy nose, runny nose, sore throat, conjunctivitis, myalgia and diarrhea), risk contact information reporting system, temperature measuring points at the entrance of food manufactory, and besides, the implementation of prevention and control measures such as registration, temperature measurement, disinfection and health code inspection etc., and it shall be only allowed for "green code" to enter into the manufactory.

2.3 Nucleic acid test of practitioners

Nucleic acid test is the important means to search for those infected people at an early time. Cold chain food practitioners should carry out relevant tests according to the "Scheme on COVID19 Prevention and Control (Eighth Edition)"(L.F.L.K.J.Z.Z.F.[2021]NO.51). For those high risk personnel, the frequency of nucleic acid test should be appropriately increased.

Personnel in high-risk positions includes but is not limited to the following personnel: high-risk personnel (who are in direct first-time contact with imported cold chain food without preventive disinfection) such as porters, stevedores, box workers, disinfection personnel, forklift workers, warehouse keepers, sampling personnel and garbage cleaning personnel in the centralized supervision warehouse or the first station cold storage; Slow-down front-end personnel of imported cold chain food production and processing enterprises, such as porters and unpackers.

Personnel in high-risk positions should carry out high-frequency nucleic acid test, which can be appropriately adjusted on the basis of risk level judged by local situations. In principle, reasonable arrangements should be made to ensure that nucleic acid test could be carried out on personnel of the same category every day.

2.4 Registration and management of outsiders

Minimize the entry of outsiders into the production and operation areas. If it is really necessary to enter, it shall register the unit and health status, confirm whether there is any contact with personnel of the risk areas, etc., and implement measures such as checking and registering the health and travel code, measuring temperature, and taking personal protection (such as wearing masks, etc.) before entering. When the vehicle enters and exits, personnel in the vehicle shall stay in the vehicle unless necessary. If it is really necessary to leave the vehicle, all the above requirements shall be completed. Any unnecessary contact with the doorman, attendants, staffs and drivers shall be avoided.

2.5 Hygienic requirements for practitioners

2.5.1 Work in good health. Ensure the good health before working, report health status information to the manufacturers, and take the initiative to accept the temperature measurement. In case of fever, dry cough, fatigue or other symptoms, take the initiative to report immediately and seek medical treatment in time.

2.5.2 Personal protection. Practitioners shall correctly wear masks, gloves and overalls during work. Work clothes should be kept clean and tidy, regularly cleaned and disinfected if necessary. Practitioners in special posts (fresh slaughter, split workshop, etc.) shall wear waterproof aprons and rubber gloves in addition to

overalls according to the requirements. Food practitioners are recommended to wear disposable gloves which must be frequently replaced and wash hands during the intervals of the replacement and before wearing. In order to avoid secondary contamination of protective goods, gloves must be replaced after the non-food related activities (such as opening/closing doors by hand, emptying garbage bins).

2.5.3 Pay attention to personal hygiene. Cover nose and mouth with paper towels or brachium when sneezing or coughing. Do not spit everywhere, and pay attention to hygiene when blowing nose. Try to avoid touching mouth, eyes and nose with hands.

2.5.4 Keep hands clean and tidy. After touching public objects such as shelves and handrails with hands, wash hands under running water with hand sanitizer or soap in time, or rub hands with quick-dry hand disinfectant.

2.6 Establish reporting system on health abnormality

For any suspected symptoms of the employees or the co-residents such as fever, dry cough and fatigue, it shall be timely reported by means of step by step or direct report as appropriate to the top leaders. Once any employee is found with the above-mentioned abnormal symptoms, it shall quickly take effective measures to ensure keeping this employee and any in close contact from the working environment. For those high risk areas, it is recommended to require the health employees to make "zero" reports according to the prevention and control regulations stipulated by local authorities.

2.7 Procedures for practitioners to return to work

According to the registration and health records of employees on duty in the manufactory, timely track the treatment and rehabilitation status of employees who are under the status such as abnormal health situation, physical discomfort, suspected or infected (infected or asymptomatic infected), and scientifically assess whether the requirements could be met for returning to work after rehabilitation. If the symptoms of confirmed cases subside and two 24-hour PCR nucleic acid tests are both negative, the isolation can be relieved. Practitioners who are close contacts should be also confirmed to meet the above requirements before returning to work.

2.8 More publicity on the knowledge of prevention and control

Carry out various forms of health education, guide practitioners to master the knowledge and skills related to the COVID19 prevention and control and other respiratory infectious diseases, develop good hygiene habits, and pay more attention to self-protection.

III. Prevention and control requirements for the process of loading, unloading, storage and transportation

3.1 Hygienic requirements for stevedores

For those working in high-risk posts and direct contacting imported cold chain food without preventive disinfection, such as porters, stevedores, unloading workers and disinfection personnel in centralized supervision warehouse or cold storage at the first station, fixed personnel and closed-loop management are required, and nucleic acid test shall be carried out with reference to 2.3.

In addition to the general personal hygiene requirements, special work clothes, disposable medical masks, gloves and others shall be worn before goods transporting, while goggles and face screens shall be worn if necessary which is to avoid frequent contact with the goods.

Especially when loading and unloading imported cold chain food from risk areas, relevant

personnel should wear masks in the whole process of goods transportation, avoid the goods clinging to face or touching nose and mouth with hands, and prevent direct contact from frozen aquatic products that may be contaminated by COVID19. If mask is damaged during the process, shall be replaced immediately.

3.2 Hygienic requirements for drivers

Based upon the hygiene requirements for practitioners, in addition to self-protection, personnel (such as drivers) transporting imported cold chain food shall not open boxes without authorization during transportation, and shall not open the package of cold chain food without authorization to directly contact cold chain food. When vehicles enter and exit, drivers and accompanying personnel should avoid unnecessary contact with doormen and staffs.

3.3 Hygienic management on goods source

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

In the process of cold chain logistics, if support or gasket needs to be installed in logistics packaging, it shall meet the relevant food safety and hygiene requirements. The temperature conditions for the storage and transportation of cold chain food shall be indicated on the logistics packaging. In order to strengthen the operation management of goods loading, uploading, transportation and others, goods cannot directly contact with the ground, and the cold chain food packaging cannot be opened at will. It shall be ensured that the temperature of cold chain food is always within the allowable fluctuation range during the process of transportation, storage and sorting. Make good record of the following information such as time, temperature and others occurred in each delivery link.

3.4 Hygienic management on vehicles

It should be ensured that the interior of the vehicle is clean, non-toxic, harmless, odor-free and pollution-free, and preventive disinfection should be regularly carried out. For specific disinfection measures, please refer to the Technical guidelines for the Prevention, Control and Disinfection of New Coronavirus in Cold Chain Food Production and Operation (Second Edition).

IV. Requirements for the COVID19 Prevention and Control in the process of production and processing

4.1 Hygienic requirements for personnel

Implement according to the requirements of 2.5.

For the slow-down front-end personnel of imported cold chain food production and processing enterprises, such as porters, unpacking workers and other personnel working in high-risk posts, fixed personnel and closed-loop management are required, and nucleic acid test shall be carried out with reference to 2.3.

4.2 Keep safe distance

Keep a distance of at least one meter. Feasible measures to keep safe distance in the food

processing environment include: setting workbench on one side of the production line, malposition during the process of production or assembling baffles in the middle of the production line to prevent face-to-face working; Strictly limit the number of employees in the food preparation area and exclude all unnecessary personnel; Divide employees into working groups or teams to reduce communication and interaction between working groups.

4.3 Goods protection and inspection

- 4.3.1 Loading and unloading protection. Stevedores who need direct contact with cold chain food shall wear work clothes, disposable medical masks, gloves and others before goods transportation, and wear goggles and face screen if necessary which is to avoid frequent contact with the goods.
- 4.3.2 Source control. Cold chain food enterprises shall do a good job in compliance inspection and evaluation on suppliers, conscientiously do a good job in verifying and inspecting each batch of food, and truthfully and legally make a record of the following information such as incoming inspection, delivery inspection, and food sales etc. Ensure the traceability of food. The preservation period of records and vouchers shall not be less than 6 months after the expiration date of food. If there is no clear expiration date, the preservation period shall not be less than 2 years.
- 4.3.3 Certificate of inspection. For imported cold chain food, importers or shippers shall cooperate with relevant departments to sample and test food and its package. For food coming from other towns or cities, distributors shall take the initiative to ask suppliers for relevant testing information related to food safety and epidemic prevention.

4.4 Cleaning and disinfection

Please refer to the Technical guidelines for the Prevention, Control and Disinfection of New Coronavirus in Cold Chain Food Production and Operation (Second Edition).

4.5 Other protection measures

- 4.5.1 Requirements for ventilation. Natural ventilation is preferred in ordinary factory areas, and mechanical ventilation can be supplemented if conditions are not available. Closed factory areas shall maintain the circulation of indoor air and air supply safety of air conditioning system. The air conditioning and ventilation system shall be regularly inspected, cleaned and disinfected to ensure the clean and safe operation.
- 4.5.2 Water supply and drainage facilities. Shall be equipped with perfect sewers and keep it smooth. Ground flushing faucets and disinfection facilities shall be equipped for flushing and disinfection of sewage. Sewage discharge shall comply with relevant regulations.

V. Requirements for prevention and control in the process of sales and operation

The following markets for cold chain food, including centralized trading markets (wholesale markets of agricultural products, free market of agricultural products, community's vegetable markets), supermarkets, convenience stores, restaurants, self-operated e-commerce and other food operators, shall be equipped with corresponding freezing and refrigeration facilities.

5.1 Hygiene requirements for personnel

Implement according to the requirements of 2.5. Food operators in special stalls such as fresh slaughter need to wear waterproof aprons and rubber gloves in addition to overalls.

5.2 Keep safe distance

Reasonably control the numbers of customers entering into the cold chain food sales area, avoid gathering and crowding, keep a distance of at least one meter, and moderately increase the confined space. Ground markers can be used for the guidance and control of orderly queuing of customers, which is convenient for customers to keep the distance, especially in crowded areas, such as reception and cash registers.

5.3 Cleaning and Disinfection

Please refer to the Technical guidelines for the Prevention, Control and Disinfection of New Coronavirus in Cold Chain Food Production and Operation (Second Edition).

5.4 Warning notification

5.4.1 Set up signs at the entrance, requiring customers not to enter the store when they are in abnormal or bad health condition, or have suspected symptoms.

5.4.2 Regularly broadcast or post notices in cold chain food retail areas (shops, stores and supermarkets) to remind customers of keeping distance and timely cleaning hands. If consumers bring their own shopping bag, it is recommended that they shall clean to use it again after bagging cold chain food.

5.5 Other protection measures

Glass barriers shall be installed at cash registers and counters, which is to encourage the non-contact paying means to reduce contact. Consideration should be given to not publicly displaying or selling unpackaged cold chain food at self-service counters.

VI. Requirements for prevention and control in the process of food processing

In order to prevent and control COVID19 pollution involving cold chain food catering services, catering service operators shall pay attention to the following prevention and control points.

6.1 Hygiene Requirements for Personnel

Implement according to the requirements of 2.5.

6.2 Keep safe distance

6.2.1 Use appropriate measures to prevent people from being too crowded, and keep a distance of at least one meter between food practitioners.

6.2.2 Seating arrangements for dining shall reach a safe social distance.

6.2.3 Ground markers can be used to facilitate customers to keep distance, especially in crowded areas, such as reception and cash registers.

6.3 Cleaning and disinfection

Please refer to the Technical guidelines for the Prevention, Control and Disinfection of New Coronavirus in Cold Chain Food Production and Operation (Second Edition).

6.4 Other protection measures

6.4.1 Provide cleaning disinfectant. Provide hand sanitizer or disposable disinfectant for employees and consumers.

6.4.2 Prevent cross contamination. Raw and cooked foods shall be separately processed

and stored, and instruments for processing uncooked foods shall be fully disinfected before cooked foods can be stored or processed.

- 6.4.3 Avoid unnecessary body contact. Encourage the non-contact paying means and non-contact delivery etc.
- 6.4.4 Keep air fresh. Windows shall be frequently opened.
- 6.4.5 Try to provide cooked food. During the epidemic period, food shall be fully heated.
- 6.4.6 Individual dining way shall be advocated. For those who cannot use this way should provide serving spoons and chopsticks.

VII. Emergency schemes in relevant areas

Cold chain food manufacturers shall formulate COVID19 emergency schemes, so as to timely handle and report the epidemic situation, and effectively prevent the spread of epidemic.

7.1 Emergency treatment on those with abnormal health conditions

Once confirmed or suspected case is found in the relevant areas of cold chain food production and operation, it is necessary to implement the prevention and control measures in these areas and curb the spread. Cooperate with relevant departments to carry out epidemiological investigation, close contact tracking management, disinfection of epidemic spots and other tasks. Sample and do the COVID19 test in those areas where the confirmed or suspected personnel work and appear, and also on the cold chain food they ever processed. For any existing air conditioning and ventilation system, it shall be cleaned and disinfected at the mean time, which can be only re-used after obtaining the qualified evaluation. Working area shall be temporarily closed under the order of severity of epidemic, and production can be only resumed after the epidemic is controlled.

According to the requirements of COVID19 prevention and control, measures such as cutting off transmission routes and isolating close contacts should be taken, and meanwhile, pollutants shall be disposed based on the regulations.

7.2 Emergency treatment on samples found to be positive test result of COVID19

Once receiving the samples' positive test result of COVID19, cold chain food manufacturers shall quickly launch the emergency scheme made by their own, and timely take emergency measures against related articles and environment under the guidance of professionals according to local requirements. Temporary storage of related articles, cooperation for the sampling, harmless treatment, disinfection of working areas, COVID19 test taking and health screening for possible contacts in time and other emergency measures. Before the disposal, shall keep the refrigerator, freezer, cold storage and other refrigeration equipment in normal operation so as to prevent the goods from spoiling or any possible pollutant diffusion. Avoid spilling or leakage in the process of transportation and disposal. Personnel involved in the transportation and disposal of related goods shall do a good job on personal protection.

For any cold chain food with positive test result, shall implement in accordance with the relevant COVID19 prevention and control requirements on hierarchical classification processing of cold chain food.