

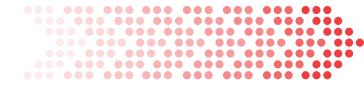


INTRODUCTION

Food logistics is a niche market that requires more than just a little know-how. Its importance is evident from the millions of dollars food and beverage companies spend on recalls each year. According to the FDA's website, "About 48 million people in the U.S. (1 in 6) get sick, 128,000 are hospitalized, and 3,000 die each year from foodborne diseases, according to recent data from the Centers for Disease Control and Prevention. This is a significant public health burden that is largely preventable."* For every stage of a shipment's journey, many hands must comply with hard and fast rules and guidelines to get the product to its endpoint—the consumer's table.

The Food Safety Modernization Act (FSMA) was signed into law in January 2011 and now governs how food is grown, harvested, processed, and shipped. Each step along the way requires careful handling and monitoring—from growing and manufacturing to packaging, from storage to staging, from the loading dock to the truck, from transit time to arrival and unloading. This is especially true for temperature-controlled freight.

The adoption of FSMA has increased overall compliance within the industry and, as a by-product, has reduced risk and enabled faster and more effective recall actions when needed. This paper will review current government rules and regulations put forth by FSMA, explain who and what is subject to the laws, and offer best practices to ensure compliance and the safety of America's food and beverage freight.



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WHO IS SUBJECT TO FSMA

- · SHIPPER: the person who arranges for the transportation of food in the U.S. by a carrier or multiple carriers sequentially
- · LOADER: a person that loads food onto a motor or rail vehicle during transportation operations
- · CARRIER: a person who physically moves food by rail or motor vehicle in commerce in the U.S.
- \cdot RECEIVER: any person who receives food at a point in the U.S. after transportation

WHO IS EXEMPT FROM FSMA

Any shippers with less than \$500,000 in average annual revenue over a three-year period.

WHAT FOODS ARE EXEMPT VERSUS NON-EXEMPT FROM FSMA?

Food not entirely enclosed by a container, such as produce or eggs, are subject to FSMA rules and regulations. Any food that is completely enclosed by a container and not temperature-controlled for safety is exempt.

BEST PRACTICES

PLANNING AND PREPARATION

A shipper's duty to uphold and maintain food safety while avoiding possible risks requires detailed planning to achieve the best results. Standard operating procedures (SOPs) are critical to the success of a safe cold chain and must be carefully written, habitually practiced, and unwaveringly enforced. People's lives depend on it, and these preventative controls have proven to make a difference.

Produce, meat, poultry and egg shipments are an example of cargo that require specific care and handling instructions. It is imperative to identify potential problem points and develop a comprehensive transportation safety plan. Checklists and SOPs would include implementation of steps like this: Trailers must be inspected before loading. Products such as fruits and vegetables must be probed, and then their temperature noted on the bill of lading. Reefer loads must be run on continuous with no cycle or stop-and-starts to help maintain stable temperatures during loading and unloading. Tracking and check calls are mandatory throughout the shipment's trip.

TRAINING AND RECORD-KEEPING

Once a checklist or SOP is established, shippers, drivers, logistics staff, quality, and food safety personnel, including loading dock employees, should be regularly and adequately trained on them. Sanitary procedures can be different depending on the individual commodity, so there should be separate SOPs for each.

Reefer trailers are not meant to cool down products but are designed instead to keep products within a range of a few degrees. The commodity should be at the desired temperature before loading onto a pre-cooled trailer.

Designated staff should be able to recognize potential threats for both unintentional and intentional contamination. Record keeping of individual training sessions and staff must be readily available if requested and maintained up to 12 months.

STORAGE/WAREHOUSING/LOADING DOCK

Perishable food is particularly vulnerable or susceptible to spoilage when it is being palletized, waiting for pickup, on a loading dock, or in a staging area that is not maintained by environmental controls. Overseeing personnel should keep loading areas and warehouse spaces open and clutter-free to allow access to easy cleaning, including the prevention of infestations of insects and vermin. Pallets, devices used in securing product, and loading equipment such as hand trucks and forklifts, should also be regularly sanitized and check for cleanliness. Using dedicated equipment marked as "Only For Food Use" will help with controls.

Perishable freight should be transferred on a cold or refrigerated loading dock if possible. If there is no access to a temperature-controlled loading or unloading areas, time parameters should be established for safe "standing" time.

Also, the SOP should ensure that any reefer unit's open-door time at the shipper/receiver is strictly monitored, especially during the summer months. Foods must always be protected from any external contamination source on loading docks, and finally, all food loads should be sealed, and the seal number must be recorded on the bill of lading.

Download Sample Truck Loading Log (pdf)

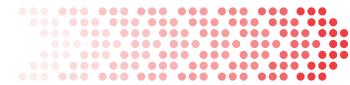
MONITORING AND TRACKING

Always confirm that the truck is a downloadable reefer (check the year to make sure it was manufactured no earlier than in the mid-2000s). If it is not, an alternate method of monitoring must be employed, such as software like Emerson or with temp tales such as TransTracker or Sensitech.

Regarding produce, the product should be probed in several locations prior to its loading. It is important to note that reefer trailers are not meant to cool down products but are designed instead to keep products within a range of a few degrees. For example, you wouldn't want to pick up a load of watermelon just picked out of a field that needs to be delivered at 40 degrees. The commodity should be at the desired temperature before loading onto a pre-cooled trailer.

Tenders and bill of ladings should always be checked to agree on the same specified temperature, and it is critical to have an emergency contact phone number on the bill of lading in case of reefer failure or any unforeseen interruption in service.

If you are using a transportation broker or 3PL, it is prudent to make



sure they provide up-to-date technology as part of their value-added services, especially tracking and temperature monitoring of all reefer freight. Essential questions to ask are, What percent of your freight is tracked? How do you ensure continuous temperatures and real-time tracking?

SAFETY PROCEDURES

Trailer Inspection: All trailer inspections should include specified sanitation procedures in writing and should be signed off on by carrier and shipper. Know what the previous load was that was hauled in the same trailer and check for any lingering residue. The trailer must be clean, disinfected if needed, dry and odor-free

The condition of the trailer and reefer unit are just as critical as the cleanliness of the cargo space. The trailer should be checked for adequate insulation and be free of holes or cracked seals that might allow cold air leakage, dust, heat, or other contaminants into the cargo space. All doors and seals in the trailer must be checked for proper containment. Trailers also must be stored in a manner to prevent the harbor of pests or contaminants.

Temperature Controls: Have clearly defined SOPs for temperature controls during loading and unloading and while in transit. Make sure the transporting carrier has an acceptable and reliable temperature recording device on each load. Have an agreed-upon policy in place with your transportation vendor regarding how to deal with any temperature violations. Do not merely state chilled, frozen, or fresh. There must be a numeric temperature is on the tender. Pre-cooling of the trailer is required for reefer shipments, which means that they should be pre-cooled for at least one hour before loading. The refrigeration unit should be checked not just by the driver but by the plant personnel as well. Older refrigeration equipment can fail and quickly risk spoilage of the cargo.

Specify what kind of temperature recorder is being used, clearly state how often the readings need to be communicated, and make sure that non-food products are separated from food items in the trailer.

Sanitation Requirements: Have an SOP written for all sanitation procedures with frequent spot inspections as well as regularly scheduled ones. Drivers and dock workers must have access to and knowledge of all sanitation procedures and best practices, including the basics, such as frequent handwashing and the location of all handwashing stations. Sanitation programs must comply with the FDA's Hazard Analysis Critical Contro Point (HACCP) requirements. (See HACCP)

Cross Contamination: <u>Cross-contamination</u> of foods like produce and food products can involve food-to-food contact, hand-to-food contact, or equipment-to-food contact. It happens most often in less-than-truckload (LTL) shipments and can create devastating

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health and safety issues. That is why extra steps should be taken when shipping partial or mixed loads of freight. Any break in the cold chain can encourage the growth of pathogens, resulting in Salmonella, Listeria monocytogenes, Escherichia coli (E-coli) and Staphylococcal food poisoning outbreaks, just to name a few. It is vital to make sure that fresh vegetables, fresh meats, and food-grade chemicals do not co-mingle on a shipment or suffer exposure from a prior load. Include SOPs regarding the proper segregation of raw foods and non-foods.

CONCLUSION

By combining risk-evaluation and preventative procedures while relying on experienced, well-trained hands to enforce them, the safety of perishable foods in today's supply chain can be significantly minimized. Laws about food safety, storage, and transportation are continually changing. It is a sound business practice to review the FDA and FSMA web pages periodically for any updates or amendments to current rulings. Here are a few helpful links.

What's new in FSMA

Answers to your most common FSMA questions

FSMA final rule for preventative controls for human food

*https://www.fda.gov/food/guidance-regulation-food-and-dietary-supplements/food-safety-modernization-act-fsma



Choptank Transport is a nationwide third-party logistics company that specializes in truckload and temperature-controlled freight services as well as less-than-truckload, intermodal, port & drayage, and heavy-haul shipments. The company's headquarters is in Preston, Maryland, with regional locations that include Baltimore, Denver, Dallas, Atlanta, and Tampa. For more information about Choptank Transport, visit our <u>Facebook page</u> or go to our website at <u>www.choptanktransport.com</u>.