



California Department of Public Health  
**MEMORANDUM**

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**DATE:** September 6, 2017

**TO:** Directors of Environmental Health

**FROM:** California Department of Public Health (CDPH), Food and Drug Branch (FDB)

**SUBJECT:** Nacho cheese warming units at retail locations

The CDPH Food and Drug Branch (FDB) and Sacramento County Environmental Management Department (SCEMD) recently investigated an outbreak of botulism linked to the consumption of ready to eat nacho cheese purchased at Valley Oak Food and Fuel in Walnut Grove, California. The nacho cheese was applied to chips by customers from a counter-top, self-service warming and dispensing unit supplied by the cheese manufacturer. These types of warming and dispensing units are typically designed to maintain the cheese at approximately 140 deg. F.

As of May 31, 2017, a total of 10 case-patients were laboratory-confirmed with *C. botulinum* toxin type A. All patients were hospitalized; nine were in an intensive care unit, seven required ventilator support, and one died. Leftover nacho cheese sauce collected from the gas station yielded *C. botulinum* toxin type A bacteria and toxin. Due to the extensive distribution of the same lot code of nacho cheese throughout the United States without additional botulism cases, internal testing conducted by the Wisconsin manufacturer of the nacho cheese, and only a single bag of cheese linked to human illness, FDB and SCEMD suspect the nacho cheese was likely contaminated at the retail location. A few items in particular were noted during the investigation that was concerning:

- The 5 pound bag of nacho cheese collected at the retail location on May 5, 2017 was being used past the “Best By” date.
- Records were not being maintained by the gas station employees indicating when the bag of nacho cheese was originally added to the warming unit.
- The plastic tool designed to open the bags of cheese (provided with the nacho cheese warming and dispensing unit) was not being used by employees.

FDB is aware that these types of nacho cheese warming and dispensing units are in use at many retail locations throughout California. These units generally provide safe, ready-to-eat foods without significant input from employees at each location. FDB would like to provide the following guidance regarding the use of nacho cheese warming and dispensing units in retail locations.

1. Management and employees should follow the instructions for each type of machine and product they use. Instructions for use may be included on the packaging of the

bagged nacho cheese or included on the interior panels of the warming and dispensing unit. These directions may include pre-heating and the length of time a product can remain at elevated holding temperatures. In some cases the product may only be held above 135 deg. F. for 4-6 days.

2. Management should ensure that records are maintained indicating when bagged cheese was last changed. This may be accomplished by writing the date the product was added to the warmer on the bag itself.
3. Management should ensure that the warming and dispensing units are not turned off at night or plugged into a timer. These types of machines need to remain "on" at all times. This will ensure that appropriate temperatures are maintained in this ready-to-eat food.
4. Management and employees should ensure that any supplied tools for opening the bags of cheese are used per the product directions. These devices need to be washed, rinsed, and sanitized between uses. In some cases these opening tools are only supplied with warming and dispensing unit.
5. Management and employees should verify on a regular basis that the internal temperature of the hot held cheese product is being held at the proper temperature. The internal temperature can be measured by placing the cheese product in a cup with a thermometer to verify the product is maintaining the minimum hot holding temperature of 135 deg. F as required under the California Retail Food Code Section 113996 or hot holding temperature as recommended by the manufacturer.

CDPH hopes this information can be shared widely to ensure retail food facilities have current information and are taking appropriate measures to keep our food supply safe. Thank you for your consideration and ongoing collaboration with our Department.