

**Conference for Food Protection
2010 Issue Form**

**Internal Number: 068
Issue: 2010 III-023**

Council Recommendation:	Accepted as Submitted _____	Accepted as Amended _____	No Action _____
Delegate Action:	Accepted _____	Rejected _____	

All information above the line is for conference use only.

Title:

Food Establishment Response Procedure to Vomiting & Diarrheal Contamination

Issue you would like the Conference to consider:

Many food establishments, including several institutional facilities that serve large populations have targeted the reduction of transmission of viruses and other pathogens by instituting procedures for cleaning and disinfection in the wake of a vomiting and diarrheal event in the facility. However, the 2009 Food Code is silent on what should be required of food establishments in terms of responding to such contamination events within a food establishment. Prompt and proper response is important to reduce the risk of transmission of norovirus and other pathogens that may be present in vomitus or fecal matter and that may become widely dispersed throughout a facility in the event of an uncontrolled discharge.

Public Health Significance:

Studies have shown that norovirus can survive on fomite surfaces for up to 12 days and that routine cleaning, without a disinfectant specifically to address norovirus, may be ineffective in eliminating its presence on fomite surfaces and can even serve as a means of spreading the virus to other fomites.(7, See Attached References) Noroviruses are the most common cause of sporadic cases and outbreaks of acute gastroenteritis (AGE) and transmission occurs via foodborne and person-to-person routes, airborne inhalation of vomitus droplets, and also through contact with contaminated environmental surfaces.(3) Food employees exposed to vomitus are at risk of contracting norovirus illness and can subsequently transfer the virus to ready-to-eat food items served to consumers.

Clean up of norovirus is different from routine cleaning and sanitizing and involves a more stringent cleaning and disinfecting process. For example, quaternary ammonium compounds are often used for routinely sanitizing food preparation surfaces or disinfecting large surfaces (e.g. countertops and floors), however, such compounds (which act by disrupting viral envelopes) do not have significant activity against certain pathogens, including norovirus. (4) It is therefore important that food establishments have procedures for the cleaning and disinfection of vomitus or diarrheal contamination events that address, among other items, the use of proper disinfectants.

Noroviruses (genus *Norovirus*, family *Caliciviridae*) are a group of related, single-stranded RNA, nonenveloped viruses that cause acute gastroenteritis in humans. (3) Noroviruses

are transmitted primarily through the fecal-oral route, either by consumption of fecally contaminated food or water or by direct person-to-person spread. Good evidence exists for transmission due to aerosolization of vomitus that presumably results in droplets contaminating surfaces or entering the oral mucosa and being swallowed.(3)

CDC estimates that 23 million cases of acute gastroenteritis are due to norovirus infection annually. (8) In 2006, the most recent year for which surveillance for Foodborne Disease Outbreak data have been analyzed, norovirus was the most common cause, accounting for 54% of outbreaks and 11,879 cases. Calicivirus caused 337 (98%) of the confirmed foodborne disease outbreaks attributed to viruses; all calicivirus outbreaks reported were attributed to norovirus. (1)

Norovirus is highly contagious, and it is thought that an inoculum of as few as 10 viral particles may be sufficient to infect an individual. (2) In addition, the potential transmission level of norovirus shed in the feces at levels up to 1 trillion viral particles per gram of feces and one projectile vomiting incident can contaminate the environment with 300,000 viral particles. (6, 9) One study found that employees who reported having cleaned up vomitus were more likely to contract illness than those who did not. (5)

Norovirus is the most common cause of gastroenteritis in people of all ages and it is responsible for greater than 50% of all foodborne gastroenteritis outbreaks. Norovirus causes acute onset of vomiting (often explosive) and diarrhea (also often explosive) which can contaminate surfaces and become airborne increasing the chances of additional infections.

When the food employee has been diagnosed, has a recent history or exposure to, or is the suspect source of a confirmed disease outbreak of norovirus, it must be reported to the person in charge per the FDA Food Code in subparagraphs 2-201.11(A)(2)(a), 2-201.11(A)(4)(a), 2-201.11(A)(5)(a), and 2-201.11.(B). If a food employee has been diagnosed with norovirus it must also be reported to the regulatory authority. (10)

The Food Code also instructs the Person in Charge to exclude or restrict a food employee who exhibits, or reports a symptom, or who reports a diagnosed illness or a history of exposure to norovirus, but it is silent on instruction to the Person in Charge on how to address a situation where the food employee or other individual becomes physically ill in areas where food may be prepared, stored or served. Once such an episode has occurred, timely effective clean-up is imperative.

Recommended Solution: The Conference recommends...:

that a letter be sent to FDA requesting modification of the 2009 Food Code to require that food establishments:

- 1) Develop and have access to a plan for responding to unexpected events that result in the discharge of vomitus or feces in any area other than a toilet; and
- 2) That such a plan address:
 - the procedures for containment and removal of any discharges, including airborne particulates;
 - the procedure for cleaning, sanitizing, and, as necessary, the disinfection of any surfaces that may have become contaminated;
 - the procedures for the evaluation and disposal of any food that may have been exposed to discharges;

- the availability of effective disinfectants, personal protective equipment, and other cleaning and disinfecting equipment and appurtenances intended for response and the proper use and disposal of such;
- the circumstances under which a food employee is to wear personal protective equipment for cleaning and disinfecting of a contaminated area;
- notification to food employees on the proper use of personal protective equipment and procedures to follow in containing, cleaning, and disinfecting a contaminated area;
- the availability of effective disinfectants, personal protective equipment, and other cleaning and disinfecting equipment and appurtenances intended for response and the proper use and disposal of such;
- the segregation of areas that may have been contaminated so as to minimize the unnecessary exposure of employees, customers and others in the facility to the discharges or to surfaces or food that may have become contaminated;
- minimizing risk of disease transmission through the exclusion and restriction of ill employees as specified in 2-201.12 of the Food Code;
- minimizing risk of disease transmission through the prompt removal of ill customers and others from areas of food preparation, service and storage; and
- the conditions under which the plan will be implemented.

Submitter Information:

Name: Glenda R. Lewis
 Organization: FDA/CFSAN
 Address: 5100 Paint Branch Parkway
 City/State/Zip: College Park, MD 20740
 Telephone: 301-436-2150 or Fax: 301-436-2672
 240-375-1680
 E-mail: glenda.lewis@fda.hhs.gov

Attachments:

- "Attachment A-References:Procedure to Vomiting & Diarrheal Contamination"

It is the policy of the Conference for Food Protection to not accept Issues that would endorse a brand name or a commercial proprietary process.