**Conference for Food Protection**

**2016 Issue Form**

**Issue: 2016 III-016**

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| **Council Recommendation:** | Accepted as  Submitted |  | Accepted as Amended |  | No Action |  |
| **Delegate Action:** | Accepted |  | Rejected |  |  |  |

*All information above the line is for conference use only.*

**Issue History:**

This is a brand new Issue.

**Title:**

Employee Health Interventions – Reducing Norovirus

**Issue you would like the Conference to consider:**

The employee health section of the 2013 FDA Food Code contains provisions for controlling the transmission of norovirus through exclusion and restriction of ill food employees. This Issue seeks to align the criteria for a food employee that is experiencing symptoms of vomiting and diarrhea with those for a food employee diagnosed with an infection from norovirus. This Issue also seeks to remove the distinction in criteria for exclusion and restriction between a highly susceptible population (HSP) and non-HSP.

**Public Health Significance:**

(note: specific references are noted numerically in parenthesis and can be found on the attached document titled: References-FDA Food Code Employee Health Interventions, Reducing Norovirus)

Norovirus is recognized as the most common cause of acute gastroenteritis (AGE), defined as vomiting or diarrhea, in all age groups worldwide and the leading cause of foodborne disease outbreaks in the United States (1-3). CDC estimates that each year in the U.S., norovirus causes 19-21 million illnesses and contributes to 56,000-71,000 hospitalizations and 570-800 deaths (4). Foodborne norovirus disease costs approximately two billion dollars each year in healthcare expenses and lost productivity alone (5). As highlighted by recent examples, the cost of norovirus outbreaks to the food service industry is also considerable. Consuming food that has been contaminated by infected food workers during preparation in restaurants and other retail settings has been identified as the most common scenario of foodborne norovirus outbreaks (3).

Vomiting and diarrhea are the most common symptoms of norovirus illness. However, food employees, like most people, do not routinely seek medical attention for these symptoms. If they do, they are likely not tested for norovirus by their health practitioner. As a result, the vast majority of norovirus illnesses are not diagnosed by a healthcare practitioner. Individuals infected with norovirus generally have symptoms for 1-3 days, but can shed virus for an average of 4 weeks after infection and can shed between 105- 1011 viral copies per gram of feces, even if they are asymptomatic (6). Infected individuals can shed copious amounts of the virus long after symptoms have ended, and only 18-2,800 viral particles are required to infect a healthy individual (7,8).

Norovirus is highly transmissible and can readily cause outbreaks in a wide variety of settings (9). The virus can be transmitted not just through food, but through other modes, such as contact with contaminated environmental surfaces and direct person-to-person contact. Further, the virus can persist and remain infectious on environmental surfaces for days to weeks and can withstand both heating and freezing temperatures (10). As such, an infected individual that is restricted from food handling, but not excluded from a food establishment, can still readily cause an outbreak.

Currently, the 2013 Food Code recommends exclusion for a minimum of 24 hours after symptoms subside for food employees with vomiting or diarrhea symptoms. For symptomatic food employees diagnosed with norovirus infection, the Food Code recommends exclusion for a minimum of 48 hours after symptoms subside. For asymptomatic food employees with a norovirus diagnosis, the Food Code recommends exclusion for those working in an establishment serving a highly susceptible population (HSP), and restriction for those working in an establishment that does not serve a highly susceptible population.

Since employee health provisions for norovirus were originally placed in the 2005 Food Code, there has not been a recognized decline in the incidence of foodborne outbreaks caused by norovirus (4, 11). Several factors influence the likelihood of norovirus transmission from an infected food employee in the retail setting, such as:

* Norovirus is a fecal-oral route pathogen that is commonly spread when food is contaminated by infected food employees (9).
* Norovirus has a low infectious dose and can be shed by infected individuals even after symptoms cease (6-8).
* Norovirus persists on food contact and non-food contact surfaces (10).
* 20% of food workers report having worked while ill with vomiting or diarrhea during at least one shift per year, 61% of which reported working two or more shifts while ill (12), suggesting there may be at least 2.5 million shifts worked while ill with vomiting or diarrhea each year in the U.S. (13).
* Infected food employees that are restricted, but not excluded, may still work with food items, such as wrapped food and food service utensils.

The continued predominance of norovirus as the leading cause of foodborne disease outbreaks over the past decade suggests that the current recommendations in the Food Code may not be adequate. In an effort to address this public health concern, FDA and CDC would like to modify the employee health controls/interventions to aid in the reduction of foodborne norovirus outbreaks.

The longer we can keep infected people away from working with food, the greater we reduce the likelihood of occurrence of foodborne illness caused by norovirus. By amending the provisions of the Food Code to recommend a minimum exclusion of 48 hours after symptoms subside for food employees with vomiting and diarrhea in general (with a diagnosis of norovirus illness OR not) and eliminating the current distinction between HSP and non-HSP settings within the employee health provisions specific to norovirus, we can further reduce the risk of transmitting norovirus at the retail level.

**Recommended Solution: The Conference recommends...:**

that a letter be sent to the FDA requesting that the 2013 Food Code, Part 2-2 Employee Health, Subpart 2-201 Responsibilities of Permit Holder, Person in Charge, Food Employees, and Conditional Employees be amended to reflect the following changes:

1. Extend the exclusion period for food employees symptomatic with vomiting or diarrhea and NO diagnosis of norovirus illness from a minimum of 24 hours after becoming asymptomatic to a minimum of 48 hours after becoming asymptomatic.
2. Remove the distinction in criteria for exclusion and restriction in highly susceptible populations (HSP) and non-HSP establishments, thereby requiring exclusion until a minimum of 48 hours after becoming asymptomatic in all settings.
3. Remove the allowance to restrict a food employee that has been diagnosed with an infection from norovirus (exclusion criteria only).
4. Extend the exclusion period for a food employee who is asymptomatic and diagnosed with norovirus illness from a minimum of 24 hours to a minimum of 48 hours.

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**Supporting Attachments:**

* "References- FDA Food Code Employee Health Interventions, Reducing norovirus"

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.