General Control Measures for Foodborne Illness Outbreaks

The following recommendations are intended to be used as initial steps in controlling foodborne illness outbreaks associated with food service establishments. These non-specific control measures can be implemented when a facility has been implicated in an outbreak, but a specific food has not been identified. Pathogen-specific control measures should be taken once the pathogen has been identified.

Personal Hygiene
Hands should be washed after visiting the restroom, before working with food, between working with raw and ready-to-eat foods, between raw species (e.g. pork, chicken, beef, seafood), and after engaging in other activities that contaminate hands. Food service employees should clean their hands and exposed portions of arms for at least 20 seconds using antibacterial soap in a handwashing sink. The following cleaning procedure should be used for hands:

- rinse under clean running warm water;
- apply soap;
- rub together for 10-15 seconds, paying attention to removing soil from fingernails and between fingers;
- thoroughly rinse under clean running warm water; and
- dry with a disposable towel or approved hand drying device.

Employee Exclusion/Restriction
Food service employees with gastrointestinal symptoms (e.g. nausea, vomiting, diarrhea, stomach cramps) should be excluded from the food service establishment until asymptomatic for at least 24 hours. Employees with gastrointestinal symptoms working within a facility that serves a highly susceptible population should be excluded from the establishment until asymptomatic for at least 48 hours. Asymptomatic employees that have been diagnosed with norovirus working within a facility that serves a highly susceptible population should be excluded until the employees have been cleared to return to work by a medical practitioner or the employees have been asymptomatic for at least 48 hours.

Cleaning Measures
Unless environmental samples are need for laboratory testing, surfaces within the food service establishment should be cleaned and disinfected immediately to prevent the possibility of cross contamination. Special attention should be given to food contact surfaces and high hand contact surfaces, such as door handles, handwash stations, bathroom fixtures, and wait areas.

A chlorine bleach/water solution is effective for disinfection of a wide variety of surfaces. The following strengths should be used based upon the type of surface:

- For stainless steel, food/mouth contact items: 1 tablespoon of bleach in 1 gallon of water (1:256 or 200 ppm)
- For non-porous surfaces such as tile floors, counter-tops, sinks, etc.: a third (1/3) cup of bleach in 1 gallon of water (1:50 or 1000 ppm).
- For porous surfaces such as wooden floors: one and two-thirds (1 2/3) cups of bleach in 1 gallon of water (1:10 or 5000 ppm)

The chlorine bleach/water solution should remain on the surface for ten minutes and then rinsed with clean water.

Note: Many quaternary ammonia disinfectants may be ineffective against norovirus. Only use EPA-registered disinfectants that have been validated to be effective against norovirus.

No Bare Hand Contact with Ready-to-Eat Food
To help control foodborne illnesses transmitted via the fecal-oral route, employees should not handle foods that are ready-to-eat (require no further cooking, or “kill step”) with their bare hands. Instead, employees should use single-use gloves, deli tissue, or utensils, such as spatulas, tongs, or dispensing equipment.
**No Raw or Undercooked Foods**
All animal foods, including shellfish, should be cooked to an internal temperature that will kill potential pathogens present in the food (as specified within 15A NCAC 18A .2600). Internal cooking temperature records should be kept by the responsible person within the establishment. Records should be made available for review by the local environmental health program at their request. The responsible person should ensure that the thermometer used for recording temperatures is accurate.

**Hold all Leftover Foods for Laboratory Analysis**
All leftover foods present that may be needed for potential laboratory testing should be segregated from all other foods in the establishment. Leftover foods should not be served or used as ingredients in other food items. If laboratory analysis is not required, leftover foods suspected of being the vehicle of foodborne illnesses should be destroyed.

**Monitoring Time/Temperature Control of Food**
Records of time/temperatures controls of potentially hazardous foods (as specified within 15A NCAC 18A .2600) should be kept by the responsible person within the establishment. Records should be made available for review by the local environmental health program at their request.

**Maintain Communication with State Epidemiologist and/or Epi-Team**
As the outbreak investigation progresses, more information will be available regarding the suspected pathogen and vehicle of transmission. Alter the control measures as needed to reflect new and emerging information.