CABINET FOR HEALTH AND FAMILY SERVICES
OFFICE OF THE SECRETARY

Ernie Fletcher
Governor

275 East Main Street, 5W-A
Frankfort, KY 40621
(502) 564-7042
Fax: (502) 564-7091
www.chfs.ky.gov

Mark D. Birdwhistell
Secretary

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Dear Health Care Facility Operator-Nursing Home Administrator:

Kentucky has experienced an increase in reported gastrointestinal illness in health care facilities this year. We are not unique, as there has been elevated awareness of these kinds of illnesses in aggregate living settings nationwide. Typically these illnesses cause an array of symptoms including nausea, diarrhea, vomiting, stomach cramps headache, low-grade fever, muscle aches, and a general sense of tiredness. A common cause of gastrointestinal outbreaks in institutional environments is a virus called norovirus. This virus is very contagious and may be easily spread among health care workers, food workers, and patients or residents, by unclean or soiled workers hands/coughs and sneezes and touching unclean surfaces.

The Kentucky Cabinet for Health and Family Services' Department for Public Health and the Office of Inspector General have developed guidelines to help your operation prevent these style illnesses, and to help you control an outbreak from expanding and recover more quickly when an outbreak occurs. The Guidelines contain detailed Phase I and Phase II protocols that address prevention of infection and control during an outbreak. While the detailed Phase I and Phase II protocols are not set forth verbatim in state nursing facility licensure and federal certification laws, the Office of Inspector General encourages and expects adherence to these protocols as part of the facility's infection control program under 42 C.F.R. 483.65 and to promote a sanitary environment under 42 C.F.R. 483.15(h) and 483.70. The facility must also take appropriate precautions during meal preparation and assure that dietary services and food preparation activities are designed to prevent the development and spread of contagious viruses and pathogens.

We understand that when patients/residents become ill, it places a much higher time demand on staff and can be very stressful. Loss of staff to illness can further compound staffing concerns and has a significant impact on the financial viability of your business. In light of this and our desire to improve the health of our citizens, we are providing the following guidelines to assist you in preventing or reducing these illnesses in your facilities.

Attached are the two sets of guidelines:

1. Phase I: General guidelines for the operation of food service operations and cleaning and general disinfection of your health care facility.
2. Phase II: Guidelines for the food service operation and cleaning and disinfection of your health care facility during an illness outbreak.

As you will see, the Phase II Guidelines are more intensive and call for additional measures beyond normal routine cleaning and disinfection when illnesses have been observed and reported.

Your kitchens or food production areas and your general resident rooms/bathrooms and public areas etc., are significant areas where both cleaning and disinfection practices are even more important. To prevent or minimize illness, both of these functional areas are critical, requiring adherence to the attached recommendations. Below are guidelines for Phase I for Food Service and General Environmental Cleaning, and Phase II for Food Service and General Environmental Cleaning.

Please see the attached information and recommendations for cleaning and disinfecting your kitchens and dishes as well as cleaning and disinfecting your resident rooms/bathrooms and public areas. These guidelines are newly developed and likely differ from what you have been practicing, so please take time to familiarize yourself with these and distribute to appropriate staff for implementation.

The Office of Inspector General and Department for Public Health will continue to respond to and offer assistance in case of a viral outbreak in an institutional setting. In an effort to reduce the incidence of infection and negative outcome to residents, the Office of Inspector General will also place heightened statewide scrutiny on certification and licensure laws related to infection control, sanitation and dietary services. Failure to establish and maintain an infection control program that assures a sanitary environment and prevents the development and transmission of disease and infection may jeopardize the health and safety of residents. In an effort to protect residents from infection and to avoid potentially significant certification or licensure deficiencies, a copy of this letter including Phase I and Phase II protocols is being circulated to every nursing facility in the Commonwealth of Kentucky.

These guidelines will also apply to many other communicable disease situations and should help you reduce the spread of illnesses such as influenza also, and will assist you in meeting your obligation under 42 C.F.R. 483.65(a) and (b) to investigate, control, and prevent infections.

As a reminder, The Department for Public Health urges your health care facility to report illness outbreaks of 2 or more residents with like symptoms to the Department at (502) 564-3418. Not only is this action required by law, but it will help us to better assist you and minimize the number of affected individuals.

The Department for Public Health and the Office of Inspector General truly wish you a safe and illness-free year and hope that the tools provided with this letter will prevent and minimize the occurrence of gastrointestinal illnesses in your facility.

William D. Hacker, MD, FAAP, CPE
Acting Undersecretary for Health
Cabinet for Health and Family Services

Robert J. Benvenuti
Inspector General
Cabinet for Health and Family Services

Kentucky Cabinet for Health and Family Services
Department for Public Health and Office of Inspector General
Norovirus Recommendations

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FOOD SERVICE PHASE I: *Normal Operations*

The most effective means of controlling the spread of virus and bacteria in the foodservice environment is frequent, thorough and effective hand washing.

Below you will find guidelines for disinfection in food service-environmental settings. While 902 KAR 45:005, Kentucky State Retail Food Code allows several food contact surface sanitization agents to be used to sanitize food contact surfaces, many may not be effective against the norovirus. As stated below, **quaternary ammonium sanitizing products are ineffective against *noro- type viruses.***

Therefore, for manual dish-utensil sanitization in the three compartment sink, **if you are using quaternary ammonia, you may want to consider switching to chlorine based (bleach) sanitization method at 50 – 100 ppm, preferably nearer the 100 ppm limit.** If you use high temperature for sanitization in conjunction with the dish machine the regulatory requirement of 180 degrees F will meet the sanitization requirement for effectiveness against noroviruses. You may consider changing or converting the sanitizing agent in low temperature dish washing machines that use quaternary ammonia to chlorine based sanitizers, especially during the time of an outbreak. It is recommended that operators consult their service technicians for assistance. During an outbreak or when there are a number of persons ill, extra precautions must be taken to ensure proper concentrations of dish sanitizers are used. For all other non-food contact surfaces in the food service area use bleach sanitization at 100 -200 ppm during non-outbreak times.

Restrict access to the food preparation areas to only those persons whose business is there. Oftentimes those who work daily with facilities begin to treat the kitchen with the familiarity as if it were their own. Do not allow others employed by the facility at large to visit the kitchen for their personal activities.

FOOD SERVICE PHASE II: *During an outbreak*

During an outbreak, which is 2 or more persons with similar symptoms, extra precautions must be taken to reduce the spread of the virus. Since quaternary ammonia sanitizers are not effective against norovirus, only chlorine based food contact sanitizers should be used during an outbreak at levels ranging from 50-100 ppm, preferably towards the 100 ppm limit. Contaminated areas (vomit/stool) must first be wiped clean with detergent and water then followed by disinfection with exposure to 5000 ppm hypochlorite solution (bleach water mixture) for at least 5 minutes in order to completely eliminate norovirus. This would be equivalent to about ¼ cup of chlorine bleach in 1 gallon of water.

This concentration is much higher than recommended for sanitizing food contact surfaces in the food code and may damage many materials, so great care must be taken in using this disinfection procedure.

If this area is a food contact area, this disinfection procedure must be followed by a second step. After the disinfection, follow with a clear water rinse and a final wipe down with a sanitizing bleach solution, consisting of 200 ppm chlorine bleach solution.

ENVIRONMENTAL CLEANING AND DISINFECTION PHASE I : *Normal Operations*

There are no hospital disinfectants registered by the U.S. Environmental Protection Agency (EPA) that have specific claims for activity against noroviruses. In the absence of such products, CDC recommends that a chlorine bleach mixture be applied to hard, non-porous, environmental surfaces in the event of a norovirus outbreak.

In normal settings a minimum concentration of household bleach mixture with water to 1000 ppm (generally a dilution 1 part household bleach solution to 50 parts water) has been demonstrated in the laboratory to be effective against surrogate viruses with properties similar to those of norovirus. Healthcare facility staff should use appropriate personal protective equipment (e.g. gloves and goggles) when working with bleach or other chemicals.

ENVIRONMENTAL CLEANING AND DISINFECTION PHASE II: *During an outbreak*

During an outbreak, which is 2 or more persons with similar symptoms, extra precautions must be taken to reduce the spread of the virus. Washing contaminated areas (vomitus/stool) must first be wiped clean with detergent and water then followed by disinfection with exposure to 5000 ppm hypochlorite solution (bleach water mixture) for at least 5 minutes in order to completely eliminate norovirus. This would be equivalent to about ¼ cup of chlorine bleach in 1 gallon of water. This concentration is much higher that recommended for sanitizing food contact surfaces in the food code and may damage many materials, so great care must be taken in using this disinfection procedure. If this area is a food contact area, this disinfection procedure must be followed by a second step. After the disinfection, follow with a clear water rinse and a final wipe down with a sanitizing bleach solution, consisting of 200 ppm chlorine bleach solution.

The following guidelines should be practiced during an illness outbreak.

- Frequent HANDWASHING: Food service workers as well as all health care workers should wash hands often with soap and warm water and dry with a disposable towel. When health care personnel's hands are visibly soiled, they should always wash with soap and warm water and dry with a disposable towel. Alcohol based hand rubs are not a replacement for hand washing, and should only be used in addition to a good hand washing program.
- When possible, facilities should not allow the flow of staff from ill residents to non-ill residents. Workers should be designated to respond to either ill or non-ill residents, and not a combination.

- Facilities should minimize group resident gatherings, where many individuals may become exposed to illness at a common event.
- Facilities should isolate residents who are ill, by confining to their rooms, (for at least 48 hours after last symptoms.) In addition to standard precautions, contact precautions are recommended for care of incontinent patients.
- Facilities should consider feeding of residents in the room, not in group settings.
- Facilities should ask visitors to consider not visiting during the outbreak event.
- If visitation is allowed, extreme precautions should be implemented such as requiring visitors to wash hands before entering and after leaving the loved one's room and exercising caution by refraining from touching services in the resident's room.
- Facilities should post mandatory hand wash signs at the entrance to the facility.
- Staff must wash hands before entering and leaving all rooms.
- Provide sanitary masks for workers/residents exposed to vomiting residents, as norovirus may be transmitted via airborne contaminants during vomiting.
- Staff should wear disposable gloves when caring for ill residents or when touching potentially contaminated surfaces. Gloves should be discarded and hands washed immediately after completing patient care.
- Disposable cleaning towels should be carefully bagged and discarded after exposure to stool/emesis.
- Contaminated linen and bedding materials should be carefully placed into laundry bags (to prevent spreading airborne virus) and washed separately in hot water for a complete wash cycle-ideally as a half load for best results.
- Clean all multi contact surfaces with sanitizing bleach cleaner at the proper strength. Examples of surfaces to be routinely cleaned are tables, wood/metal chairs, wheelchair arms and handles, door knobs, bath sinks and toilets, exit/entry doors, community tables, telephones, casino chips, elevator buttons, railings and any other surface that receives handling or contact.

There are disinfectants available that work against other non-enveloped RNA viruses that cause enteric disease (e.g., hepatitis A virus and poliovirus). However, it is not known if these disinfectants would be equally effective against norovirus.

For additional information regarding illness or outbreak, please contact the Kentucky Department for Public Health's Division of Epidemiology at (502) 564-3418, the Division of Public Health Protection and Safety's Food Safety Branch at (502) 564-7181 or your local health department.

*Note: The use of trade names and commercial sources is for information purposes only and does not constitute endorsement by CDC, the U.S. Public Health Service (PHS), or the Department of Health and Human Services (DHHS) or the DPH, CHFS.