



VOORHEES PEDIATRIC FACILITY OUTBREAK RESPONSE PLAN

PURPOSE:

Voorhees Pediatric Facility (VPF) is functionally the home for residents who are technology dependent, hence comfort, dignity, and rights are paramount. As a residential facility, VPF is required to provide socialization of residents through group activities. While these activities are important for promoting good physical and mental health, they may also increase communicable infectious disease exposure and transmission.

Occupational, physical, speech-language and therapeutic recreational activities as well as in-house educational services while vital toward restoring or maintaining physical and mental function, may increase risk for person-to-person transmission or exposure to contaminated environmental surfaces. As a result, VPF has established a comprehensive outbreak protocol for infants, children and young adults. The facility uses current evidenced-based guidelines, protocols and standards from: Centers for Medicare and Medicaid (CMS); Centers for Disease Control (CDC); World Health Organization (WHO); Occupational Safety and Health Administration (OSHA); New Jersey Department of Health (NJDOH); recommendations from the NJ Communicable Disease Service (CDS); and recommendations from an Infection Control Assessment Response (ICAR) survey conducted both in May and December of 2018. These are developed and approved by the Infection Control Committee.

Our overall goal is to protect our residents from severe infections and their consequences. This goal is to be balanced with the overarching mission to provide our residents with the therapy and educational services, social interaction, and developmental stimulation that is essential to promoting their highest practicable physical, mental and/or psychosocial well-being. Steps that may or may not occur simultaneously during the course of investigation include:

- Confirm that an outbreak exists.
- Verify the diagnosis using clinical, epidemiological and lab test information, considering seasonal disease occurrence.
- Develop a case definition based on clinical and laboratory criteria.
- Perform active surveillance.
- Document cases in a line list.
- Identify and eliminate transmission sources when possible.
- Institute evidence-based control measures, balancing infection control concerns with disruption of residents' quality of life routines.
- Evaluate effectiveness of control measures and modify as needed.
- Summarize the investigation in a written report to communicate findings.



The following VPF Infection Control policies and procedures provide the supportive framework for this comprehensive plan:

- Surveillance Program
- Infectious Disease Outbreak Surge Plan
- Infection Prevention Measures for Visitors
- Resident/Guardian and Visitor Notification of Infections Disease Outbreak
- Reportable Events
- Protection of the Resident
- VPF Infection Control Plan and Annual Risk Assessment
- Training Programs
- Outbreak Communication Plan
- Daily Surveillance for Infection, and Use of Control Measures
- Initiation of Isolation
- Employee Health Policies

POLICY:

To prevent the transmission of **all** gastrointestinal and respiratory infections and others, including novel organisms such as H1N1 influenza. This is to be achieved by maintaining a high, evidence-based, baseline level of standard infection prevention measures such as hand hygiene, environmental cleaning, plus daily surveillance for the earliest recognition and isolation of possible contagious disease.

OBJECTIVES:

1. Maintain daily active surveillance for resident signs/symptoms and staff of contagious disease. In order to rapidly identify outbreaks, this surveillance will occur at all levels of clinical staff, with information transmitted up the chain of command to medical staff on a daily basis.
2. Confirm that an outbreak exists.
3. Verify the diagnosis using clinical, epidemiological, and laboratory information, and develop a Case Definition.
4. Implement infection control measures, including a cohort plan which allows for the separation of sick and healthy residents, and which utilizes designated isolation areas when needed.
5. Maintain an outbreak communication policy to notify and update staff, residents/families, visitors, and receiving institutions.
6. Maintain a policy for identification and restriction of potentially sick staff and visitors.



7. Maintain a culture which promotes infection prevention. This will include a robust infection prevention education plan, as well as performance monitoring, at all levels of staff throughout the year.
8. Maintain excellent cleaning and disinfection strategies on a daily basis, focusing on commonly touched surfaces and on separation of clean vs. dirty equipment. This is to be a multidisciplinary responsibility, and cleaning will be reinforced during outbreaks.
9. Ensure that personal protective equipment (PPE) is available to all staff and visitors entering resident rooms. Hand hygiene products are to be amply available throughout the facility.
10. Increase staff communication and education regarding spread of infection during outbreaks.
11. Maintain a line list, updated twice daily, and with ongoing communication with the appropriate local and state offices. Investigate possible sources of contagion and the effectiveness of control measures, and modify control strategies as needed.
12. Maintain therapy and education services to residents in all cohorts, as appropriate, while maintaining infection prevention measures.

PROCEDURE

1. Maintain daily surveillance for infections.
 - a. Staff will be required to maintain vigilance for signs of infection: fever or temp elevation of at least 1 degree F above baseline; increase in or change of color/consistency of nasal, oral, or lower respiratory secretions; cough; sneeze; unexplained increase in HR, RR, or work of breathing; vomiting; loose or watery stools; behavior change (e.g. lethargy, fussiness or increased sleeping).
 - b. Staff will report possible signs of infection to the Charge Nurse. This is expected to occur on all shifts, and to include all staff who interact with residents.
 - c. The Charge Nurse will notify the Nursing Supervisor of all residents who show possible signs of infection. The Nursing Supervisor and Charge Nurse will evaluate the resident, implement transmission-based precautions, and contact medical staff. Medical staff will evaluate the



- resident and make the final decision regarding laboratory testing and continuation of isolation measures.
- d. Medical staff will notify the Infection Control Preventionist and administrative staff that a possible outbreak has occurred and will set into motion the outbreak checklist and communication plan.
 - e. Medical staff will work with supervisors of nursing, respiratory, and therapy staff to determine possible contacts with the sick resident; in order to identify healthy-exposed residents.
2. Confirm that an outbreak exists:
- a. A respiratory viral outbreak is identified when daily surveillance (see 1 above) reveals a cluster of acute respiratory illness (ARI) within a group of residents or staff. ARI includes any 2 of the following: fever, sore/inflamed throat, nasal congestion, cough, increased lower respiratory secretions, rhinorrhea, in the absence of a known cause (allergy, exacerbation of bronchiectasis, etc.). Alternatively, an outbreak will be identified by one laboratory confirmed case of respiratory viral infection.
 - b. A gastro enteric outbreak is identified when daily surveillance reveals a cluster of residents or staff with 3 or more watery or liquid stools than baseline for the individual/24 hr., or 2 or more episodes of vomiting than baseline/24 hr. Alternatively, an outbreak can be identified as one laboratory confirmed case of norovirus, or two laboratory confirmed cases of bacterial enteric pathogen (shigella, salmonella, E coli, campylobacter, etc.)
 - c. An outbreak of other highly contagious diseases, such as tuberculosis, scabies, or lice will be defined as the occurrence of even a single case.
3. Verify the diagnosis using clinical, epidemiological, and laboratory information, and develop an outbreak case definition.
- a. Determine the cause of the outbreak based on history, physical examination, and/or laboratory findings. Epidemiologic data regarding community outbreaks and seasonal occurrence is also to be considered. Laboratory testing of several ill residents or staff will be obtained, using existing VPF protocols, and Virtua Hospital which is our contract laboratory. Specimens will also be sent to the New Jersey Department of Health (NJDOH) reference lab upon request by regulatory agencies. Regardless of laboratory findings, public health control measures will be implemented.
 - b. A case definition will be developed by the local health department or NJDOH with cooperation of VPF medical staff and Infection Control Preventionist.
 - c. The necessity of laboratory confirmation of additional sick residents or staff will be determined by medical staff, using the case definition.



4. Implement control measures.
 - a. Three cohort groups will be identified, with status updated twice daily: healthy, sick, and healthy exposed. Identification of cases will occur via daily surveillance (see #1.) and twice daily meetings with supervisory and medical staff.
 - b. Depending on the infectious organism, appropriate isolation measures will be implemented, including use of personal protective equipment (PPE).
 - c. When appropriate, based on the nature of the organism and the potential for harm, ill residents will be isolated in VPF's designated isolation areas: Activities of Daily Living (ADL Room), Day Room, and Rehabilitation Gym.
 - d. Isolation will be based on laboratory confirmation as much as possible, in order to avoid cohorting residents with different infectious etiologies. The facility will evoke its guidelines for a surge in infectious residents.
 - e. Staff will be restricted to deliver care for a single cohort, whenever possible. Alternatively, when assignment to a single cohort is not possible, staff will provide care to well residents, then healthy exposed, and lastly to sick residents.
 - f. Supplies and equipment will be isolated for use within a single cohort. Isolation and cleaning of equipment will be in accordance with established VPF guidelines.
 - g. Group activities, visitors, and movement of residents and staff within the facility will be restricted, to be determined by medical staff in coordination with the Infection Control Preventionist and physician infectious disease consultant, and the NJDOH when appropriate.
 - h. Increased cleaning and disinfection measures by housekeeping to twice daily, concentrating on frequently touched surfaces in both resident and common areas.
 - i. Antiviral therapy will be instituted for residents with laboratory confirmed influenza and for residents suspected of having influenza. Prophylaxis will be instituted for well exposed residents. Staff will be strongly encouraged to receive prophylaxis as well.
 - j. Depending on the organism involved, particularly stringent cohorting and isolation measures will be considered for residents assessed to be at heightened risk of severe infection, based on immune status, immunization status, and other medical issues.

5. Maintain an outbreak notification plan to update staff, residents and families, and receiving institutions.
 - a. All staff will be notified via email, text, and within the home page of the electronic medical record (EMR) regarding the presence of an



- outbreak. Information regarding control measures, risks to staff and residents, and signs and symptoms of infection are to be included
- b. Families are guardians will be notified by mail at the onset of an outbreak and updated as changes in intensity or control measures occur.
 - c. Receiving institutions will be notified of the presence of an outbreak by notifying their infection control officer. All efforts will be made to limit transport of sick and well exposed children to other institutions to only urgent issues.
6. Maintain a policy for identification and restriction of potentially sick staff and visitors.
- a. Staff will be urged to call out from work if they show any signs of illness. Signs and symptoms of the infection are part of the outbreak notification plan (see #5 above.)
 - b. Staff with signs of illness will be sent home immediately as per policy/procedure.
 - c. Upon arrival to the front desk, as per policy/procedure, all visitors will complete a screening questionnaire to identify possible contagious disease. Any positive or questionable responses will be evaluated by the nursing supervisor on duty, with input from medical staff and the Infection Control Preventionist when needed.
 - d. Sick staff will be excluded from entry until they have been afebrile and without symptoms of illness for at least 48 hr.
 - e. Non-essential visitors will be restricted as much as possible
 - f. VPF will maintain usual restriction of children younger than 13 years old during the respiratory viral season.
 - g. New admissions will not occur during outbreaks unless there is complete segregation of sick/ well exposed cohorts from not sick/not exposed cohorts within the facility.
7. Maintain a culture which promotes infection prevention:
- a. Infection Prevention Champions in every clinical department will provide staff education to their peers. Education will be practical and interactive, in small groups at the point of care, multiple times each month. Champions will receive ongoing training for sessions by our Infection Control Officer, Nurse Educator, and Medical Director. Attendance will be tracked. Follow up quizzes will track topics needing reinforcement.
 - b. Infection rates in each VPF Neighborhood will be made public to staff, in the spirit of promoting friendly competition to excel.



- c. Infection prevention will be promoted by educational posters, emails, and daily staff huddles, and during start of shift huddles within departments. Hand hygiene and respiratory etiquette will be reinforced.
 - e. All staff with direct resident care will be expected to clean point of care surfaces at the start and end of each shift, maintain stocking of supplies, and maintain tidiness. Monitoring for compliance will be conducted on a regular basis
 - f. Huddles between respiratory and nursing supervisors will occur at the beginning and end of each shift in order to review cohorts, staffing, potential for breaches, and identification of possible new cases.
 - g. Medical staff, nursing, respiratory and therapy representatives will meet daily to review possible new cases, cohort groups and control measures. Appropriate updates are then disseminated to all staff via email
 - h. Front desk staff will reinforce hand hygiene and respiratory etiquette with all visitors.
8. Maintain excellent cleaning and disinfection strategies on a daily basis, focusing on commonly touched surfaces and on separation of clean vs. dirty equipment.
- a. Cleaning work spaces and common areas is a multidisciplinary responsibility, and cleaning will be reinforced during outbreaks
 - b. Approved disinfecting agents will be used.
 - c. Housecleaning will be increased to twice daily during outbreaks
 - d. The electrostatic gun will be used to treat commonly touched areas twice daily during outbreaks
 - e. Maintain equipment cleaning as per facility policy & procedure.
9. Ensure that Personal Protective Equipment (PPE) is available to all staff entering resident rooms, and that hand hygiene products are amply available in all areas of the facility.
- a. PPE is available in hallways, and in over the door racks of isolation rooms. Stocking is to be maintained as per policy.
 - b. Hand gel dispensers are inside and outside of rooms
 - c. Antibacterial soap dispensers are present and maintained at all sinks.
10. Increase staff education and communication during outbreaks.
- a. Daily huddles will occur within the nursing and respiratory staff for each shift. Nursing and respiratory supervisors will update staff regarding the latest cohort list, and reinforce education regarding



control measures, not working when ill, respiratory hygiene, and environmental tidiness and cleaning.

- b. Daily to weekly emails and postings on the electronic medical record (EMR) will reinforce control measures and encourage optimal compliance.
- c. Email and mail communication with family will reinforce the need for hand hygiene and other PPE when appropriate.

11. Maintain a line list and communication with the DOH/CDS. Investigate possible sources of contagion and modify control measures as needed.

- a. The line list of sick and well exposed residents, and sick staff, will be updated twice daily.
- b. Line listings are to be posted on the shared drive, and emailed to all staff in order to ensure that resident isolation status is up to date.
- c. Line listings will be forwarded to and discussed with the DOH daily upon request.
- d. Line listings and facility outbreak mapping will be used to ascertain possible sources of contagion, including classrooms, therapeutic and recreational activities, staffing pattern, housekeeping, and environmental factors.
- e. Modifications of control measures will be made based on these assessments and the best judgment of medical staff

12. Maintain therapy and education services to residents in all cohorts, as appropriate, while maintaining infection prevention measures.

- a. All efforts will be made to provide 1:1 educational, therapy and recreational sessions with residents who are in the sick and healthy exposed cohorts, while maintaining appropriate isolation and control measures.
- b. The institution of infection control measures will be balanced with concerns regarding disruption of resident developmental status, emotional health, and quality of life.
- c. Medical staff will be responsible for determining which residents are clinically appropriate to receive educational, therapeutic and recreational services.

13. Maintain clear lines of accountability and authority regarding infection prevention.

- a. The Infection Preventionist, through the authority of organizational leadership and the Infection Control Committee (ICC), assigns responsibility for the development of the IC program and its management.



- b. The Infection Control Committee meets quarterly or more often if required. Committee members include:
- VPF Infection Preventionist
 - Medical Director
 - Director, Nursing
 - Nursing Managers/Supervisors
 - Nurse Educator
 - Immunization Nurse
 - Pediatric Infectious Disease Consultant
 - Infection Prevention Consult, C.I.C.
 - Director, Rehabilitative Services
 - Director, Respiratory Therapy
 - Administrator, VPF
 - Director, Dietary Services
 - Director, Environmental Services
 - Administrator, Medical Day
 - Nurse Manager, Bancroft School
 - Director, Social Services
- The following shall participate as ad hoc members:
- Director, Plant Operations
 - Pharmacy Representative
 - Laboratory Liaison
- c. Committee members provide clinical, administrative and epidemiological expertise.
- d. Infection prevention personnel at VPF include:
- 0.9 FTE Infection Preventionist Registered Nurse
 - Pediatric Infectious Disease Physician Consultant
 - Infection Preventionist C.I.C. Consultant
- e. The Infection Preventionist, with input from the ICC, develops the Infection Control Risk Assessment, IC plan, evaluates prioritized goals and strategies/interventions.
- f. The Pediatric Infectious Disease Physician Consultant and the Infection Preventionist Consultant (C.I.C.) must attend at least 50% of the Infection Control Committee meetings.



14. Conduct an annual review and updates to the response plan.
 - a. The plan will be reviewed and on an **annual** basis by the Infection Control Committee.
 - b. **Any material changes to the outbreak response plan must be submitted to the DOH within 30 days after completing the change.**



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