Outbreak Management Strategies for Long-Term Care Facilities

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- For educational purposes only
- No endorsement of products, software, or tools



Target Audience

- Administrators
- Directors of Nursing
- Infection Preventionists
- Nurses
- Certified Nurse Assistants
- General long-term care staff



Objectives





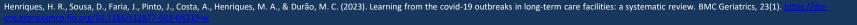
Introduction

Long-term care facilities (LTCF) are vulnerable to outbreaks of respiratory diseases, such as those caused by the influenza virus

LTCFs in the European Union/European Economic Area (EU/EEA) have reported more than 800,000 fatal cases during the COVID-19 pandemic, with more than 88% affecting adults over 65 years of age

Approximately 634,179 US COVID-19 deaths were reported by August, 2021. The number of nursing home residents who died was estimated to be 21 percent of all deaths in nursing homes at the time

Cronin, C. J., & Evans, W. N. (2022). Nursing home quality, COVID-19 deaths, and excess mortality. Journal of Health Economics, 82. https://cloice.exprovemep.ilo.org/10.1016/iclinealecc. 2022.102592





Lansbury LE, Brown CS, Nguyen-Van-Tam JS. Influenza in long-term care facilities. Influenza Other Respir Viruses. 2017;11(5):356-66. https:// doi.org/10.1111/irv.12464.

Definition



Outbreaks in long-term care (LTC) settings refer to the occurrence of an increased number of cases of infectious diseases within a confined facility, such as nursing homes, assisted living facilities, and skilled nursing facilities



These outbreaks often involve contagious pathogens spreading rapidly among residents, staff, and visitors within the facility



Outbreaks can manifest as clusters of respiratory infections, gastrointestinal illnesses, or other communicable diseases



Importance of Effective Outbreak Management

Protection of Vulnerable Populations

Prevention of Spread

Minimization of Morbidity and Mortality

Regulatory Compliance

Preservation of Facility's Reputation



Common Pathogens Causing Outbreaks in LTC



Respiratory Viruses: Influenza viruses, respiratory syncytial virus (RSV), SARS-CoV-2 (COVID-19),and adenovirus



Gastrointestinal Pathogens: Norovirus, Clostridium difficile (C. difficile), and various bacterial pathogens (e.g., Salmonella, Escherichia coli)



Group A Streptococcus (GAS)



Methicillin-Resistant Staphylococcus aureus (MRSA), and Other Multidrug-Resistant Organisms (MDROs).

Centers for Disease Control and Prevention [CDC]. (2020). Serious Infections and Outbreaks Occurring in LTCFs. https://www.cdc.gov/longtermcare/staff/report-publications.html#print



Gosch, M., Heppner, H. J., Lim, S., & Singler, K. (2021). Recommendations for the management of COVID-19 pandemic in long-term care facilities. Empfehlungen für die medizinische Versorgung von Bewohnern in Langzeitpflegeeinrichtungen im Rahmen der COVID-19-Pandemie. Zeitschrift fur Gerontologie und Geriatrie, 54(2), 136–140. <u>https://doi.org/10.1007/s00391-021-01847-1</u>

Recognizing Early Signs of Outbreaks

Increased Incidence of Illness

Unexplained Deaths or Hospitalizations Positive Laboratory Results

Staff Absenteeism or Illness Resident and Family Complaints



Elements for Effective Outbreak Management



Preparation and Planning

Surveillance and Ear Detection Outbreak Investigation and Response Infection Control Measures Staffing and Resource Management During Outbreaks

Post-Outbreak Evaluation and Planning



Preparation and Planning

Developing an Outbreak Management Plan

• Establish a multidisciplinary outbreak management team, defining roles and responsibilities, and creating a written plan outlining protocols for surveillance, identification, investigation, and control of outbreaks.

Staff Training and Education

• Provide comprehensive training programs for healthcare personnel on infection prevention and control practices, outbreak recognition, and response protocols, along with regular orientation sessions for new staff members.

Stockpiling Essential Supplies

• Assess facility needs for essential supplies and resources required for outbreak management, establish adequate stockpiles, and collaborate with suppliers to maintain a reliable supply chain.

Establishing Communication Channels

• Develop clear communication protocols and channels for disseminating information to staff, residents, families, regulatory agencies, and other stakeholders during outbreaks.

Surveillance and Early Detection

Implementing Surveillance Systems

• Establishing systems for monitoring resident health status, tracking infectious disease trends, and identifying clusters of illness or unusual patterns of symptoms. E.g. Line listing, call out logs, screening and testing programs

Monitoring Symptoms and Laboratory Results

 Regular monitoring for signs and symptoms of infections among residents, along with prompt testing and reporting of positive laboratory results to facilitate early detection of outbreaks.

Encouraging Staff and Resident Vaccination



Outbreak Investigation and Response

Conducting Prompt Investigations

 Investigate suspected outbreaks promptly to determine the source (contact tracing), mode of transmission, and extent of the outbreak. Implementing Control Measures

 Implementing targeted control measures, such as isolation and quarantine protocols, cohorting of residents, enhanced environmental cleaning and disinfection, visitor restrictions, and symptom monitoring

Communication and Coordination

 Maintaining open communication with staff, residents, families, and external partners, such as public health agencies, to coordinate response efforts, provide updates, and address questions and concerns.



Infection Control Measures

Adhere to Standard Precautions

• Hand hygiene, respiratory hygiene, and safe injection practices, to prevent the transmission of infectious agents.

Implement Transmission-Based Precautions

• Contact, droplet, or airborne precautions, based on the mode of transmission of specific pathogens and the clinical presentation of infected individuals.

Environmental Cleaning and Disinfection

• Ensure thorough cleaning and disinfection of high-touch surfaces, shared equipment, and resident living areas using EPA-approved disinfectants effective against target pathogens.





Staffing and Resource Management During Outbreaks

Adjusting	 Adjusting Staffing Levels Assess staffing needs during outbreaks and implementing strategies to ensure adequate coverage, including adjusting schedules, reassigning duties, and leveraging support from external resources.
Allocating	 Allocating Resources Ensure sufficient availability of resources, such as personal protective equipment (PPE), testing kits, medications, and medical supplies, to support outbreak response efforts.
Supporting	 Supporting Staff Well-Being Providing support services for staff members, such as counseling, stress management resources, and access to personal protective equipment, to safeguard their physical and mental well-being during outbreaks.



Post Outbreak Evaluation and Planning



Assess Effectiveness

Evaluate the effectiveness of outbreak management strategies, including surveillance systems, control measures, communication protocols, and resource allocation, to identify strengths and areas for improvement.



Updating Policies and Procedures

Updating outbreak management plans, policies, and procedures based on lessons learned from outbreak experiences and emerging best practices.



Enhancing Preparedness

Enhancing facility preparedness for future outbreaks through ongoing staff training and education, stockpiling essential supplies, refining communication channels, and conducting regular drills and exercises.



The Role of the Nurse in Outbreak Management



Conduct regular resident assessments to monitor for signs and symptoms of infectious diseases.



Notify appropriate personnel of any unusual patterns of illness or clusters of symptoms among residents.



Perform diagnostic tests, such as collecting respiratory or stool specimens, as indicated by the facility's protocols.



Document and reporting findings accurately and promptly to facilitate early detection of outbreaks.



Role of the Nurse Continued



Implement standard precautions, including hand hygiene, personal protective equipment (PPE) usage, and environmental cleaning



Educate residents, families, and staff on infection control practices and outbreak prevention strategies.



Assist with the implementation of transmission-based precautions, such as isolation and cohorting of residents with suspected or confirmed infections.



Monitor compliance with infection control protocols and intervening as needed to address lapses or deficiencies.



Role of the Nurse Continued



Assist with the implementation of control measures such as quarantine protocols, visitor restrictions, and enhanced surveillance, to contain the spread of infections.



Providing ongoing monitoring and follow-up care for affected residents, including symptom management and medication administration.



Engage in continuing education and infection control trainings



Serving as a resource and mentor for new staff members, providing guidance and support in implementing infection control practices and outbreak management strategies.



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