2016-2017 Influenza Season Outbreak Response Overview

Infection Control Assessment and Response Program Update

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*Clark County Public Health*
### 2016-2017 Influenza Season
#### LTCF Outbreak Summary

<table>
<thead>
<tr>
<th>Outbreak Location</th>
<th>Illness Onset Date of First Case</th>
<th>Illness Onset Date of Last Case</th>
<th>Outbreak Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veteran's Administration Skilled Nursing Center</td>
<td>12/17/2016</td>
<td></td>
<td>ONGOING</td>
</tr>
<tr>
<td>ManorCare Salmon Creek</td>
<td>01/01/2017</td>
<td></td>
<td>ONGOING</td>
</tr>
<tr>
<td>Brookdale Fisher's Landing</td>
<td>01/01/2017</td>
<td></td>
<td>ONGOING</td>
</tr>
<tr>
<td>Avamere Rehabilitation of Cascade Park</td>
<td>01/18/2017</td>
<td></td>
<td>ONGOING</td>
</tr>
<tr>
<td>Prestige Hazeldell Assisted Living</td>
<td>12/03/2016</td>
<td>12/22/2016</td>
<td>CLOSED</td>
</tr>
<tr>
<td>Van Mall Retirement and Assisted Living</td>
<td>12/05/2016</td>
<td>12/19/2016</td>
<td>CLOSED</td>
</tr>
<tr>
<td>Columbia Ridge Senior Living</td>
<td>12/10/2016</td>
<td>12/25/2016</td>
<td>CLOSED</td>
</tr>
<tr>
<td>The Hampton at Salmon Creek</td>
<td>12/13/2016</td>
<td>12/30/2016</td>
<td>CLOSED</td>
</tr>
<tr>
<td>Touchmark at Fairway Village</td>
<td>12/16/2016</td>
<td>12/25/2016</td>
<td>CLOSED</td>
</tr>
<tr>
<td>Cascade Inn Assisted Living Facility</td>
<td>12/23/2016</td>
<td>12/31/2016</td>
<td>CLOSED</td>
</tr>
<tr>
<td>Glenwood Place Senior Living</td>
<td>12/26/2016</td>
<td>01/10/2017</td>
<td>CLOSED</td>
</tr>
<tr>
<td>Evergreen Inn</td>
<td>12/31/2016</td>
<td>01/04/2017</td>
<td>CLOSED</td>
</tr>
<tr>
<td>Prestige Care and Rehabilitation Camas</td>
<td>01/01/2017</td>
<td>01/09/2017</td>
<td>CLOSED</td>
</tr>
</tbody>
</table>

* N = 13
Overview of Outbreak Response

Step 1: Notification
• Suspected / confirmed outbreaks in LTCF are reportable to public health (WAC 246-101-010 and 305).

Step 2: Determine presence of outbreak
• Phone call to facility to gather information about situation – what’s really going on?
Step 3: Outbreak identified

- Comprehensive assessment of facility design and services provided.
- Assess control measures initiated to date and readiness to respond.
- Share outbreak response toolkit materials tailored to the facilities need.
- Notify LTCF, EMS and hospital partners.
Seasonal influenza ("flu") Outbreak Resources

Preparing for an outbreak
- Influenza Outbreak Preparation and Management (click here)
- WA State DOH Recommendations for Prevention and Control of Influenza Outbreaks in LTCF (click here)
- Influenza Outbreak in LTCF Frequently Asked Questions (click here)
- Influenza Outbreak Sample Line List (click here)
- Tamiflu Standing Orders Template Example (click here)
- CDC Guidance for Antiviral Agents (click here)

Additional resources:
- Influenza FAQ (click here)
- Cold vs. Flu FAQ (click here)
- Cover your Cough Signs (click here)
- Inter-Facility Transfer Form (click here)

Viral Gastroenteritis (VGE) Outbreak Resources

Norovirus is a common cause of gastroenteritis. It is often responsible for outbreaks in schools, child care centers, Long Term Care Facilities, and on cruise ships. More than 50 percent of all food borne illnesses in the United States are caused by norovirus, most often from ill food workers who contaminate the food they prepare. People infected with norovirus may still be contagious for up to 3 days after they are better. Norovirus infections occur year round but are more common during the winter months.

Preparing for an outbreak:
- VGE Outbreak Preparation and Management (click here)
- CDC Key Infection Control Recommendations (click here)
- VGE Outbreak Sample Line List (click here)
- CDC Guidelines for the Prevention and Control of Norovirus Gastroenteritis Outbreaks in Healthcare Settings (click here)
- CDC Norovirus outbreak control resource toolkit (lots of printable materials) (click here)
- EPA Registered Disinfectants Effective Against Norovirus (click here)

Influenza Outbreak Preparation and Management for Long Term Care Facilities (LTCF)

**Diagnosis**
- Common symptoms of influenza include: fever, fatigue, headaches, cough, sore throat, runny or stuffy nose, chills, and muscle aches.
- Familiarize yourself with signs and symptoms of influenza-like illness (ILI) in the elderly.
- Elderly patients may experience more subtle symptoms, including anorexia, mental status changes, pneumonia, low-grade or no fever, and worsening of chronic respiratory conditions or congestive heart failure.
- Public Health can provide specimen collection kits and laboratory testing at no cost to you when influenza is suspected.
- Even if it’s not influenza season, influenza testing should occur when a resident has signs and symptoms that could be due to influenza, and especially when two residents or more develop respiratory illness within 72 hours of each other.

**Initiation Period**
- 1–4 days (avg. 2)

**Period of Communicability**
- 1 day before to 10 days after symptom onset.

**Lab Testing**
- Rapid influenza diagnostic test (neg. test does not rule out influenza)
- Viral cell culture
- RT-PCR

**Treatment vs. Prophylaxis**
- **Antiviral Treatment:** Administer antiviral medications to all residents and staff with confirmed or suspected ILI. Antiviral treatment can shorten duration of fever, illness symptoms, and hospitalizations, and may reduce risk of complications such as pneumonia, respiratory failure or death. **DO NOT** wait for lab results to initiate treatment.
- **Chemoprophylaxis:** Administer antiviral medication to all non-ill residents and consider for non-ill, unvaccinated staff starting when, at least 2 residents are ill within 72 hours of each other and at least one resident has laboratory-confirmed influenza.

**Influenza Vaccination**
Vaccinations can decrease the likelihood of an outbreak, and in the event of an outbreak, can decrease hospitalizations and deaths among residents. The Centers for Disease Control and Prevention (CDC) recommends annual influenza vaccination for everyone 6 months and older, especially for LTCF residents and staff.

When to report to Clark County Public Health (CCPH)
Long term care facilities are required to report all suspected and confirmed outbreaks to their local health jurisdiction (LHJ) per Washington Administrative Code (WAC) 246-101-810 and 365. In Clark County, LTCFs are required to report the following:
- A sudden increase in acute respiratory illness (ARI) over the normal background rate (e.g., ≥2 more cases of acute respiratory illness occurring within 72 hours of each other) OR
- Any patient who tests positive for influenza.

In the event of an outbreak, CCPH will work with the facility to determine appropriate response and the need for additional control measures based on CDC and the Washington Department of Health recommendations. Control measures will be determined on a case-by-case basis in response to that particular outbreak. All control measures should be continued until the outbreak is over, typically 7 days after the last onset of symptoms among residents or staff. CCPH may also request specimen collection for viral culture or PCR on a subset of residents and/or staff with most recent onset of illness.

AFPI is defined as fever >100°F and any combination of the following symptoms: cough, chills, sore throat, runny or stuffy nose, muscle or body aches, headaches or fatigue.
Overview of Outbreak Response

Step 4: Monitor outbreak

- Conduct ongoing surveillance.
- Continue to assess effectiveness of control measures and facility specific needs.
Step 5: Declare outbreak over

- Surveillance data meets criteria.
- Notify affected facility.
- Notify LTCF, EMS and hospital partners.
- Send final report to DOH.
- Work with facility to review response and identify additional resource / training needs.
Elements of Successful Outbreak Response

Community partnerships:
• Hospitals, EMS, LTCF, HAI Task Force, providers
• DOH, DSHS, Oregon Public Health

CCPH staff resources:
• Epidemiologist, infection control practitioner, public health nurses.

Capacity to conduct outreach & education:
• Educate community partners on reporting requirements, outbreak control measures, available resources.

Tools and resources to guide response:
• Available tools through DOH and CDC.
• CCPH developed LTCF resource webpage, external & internal influenza outbreak response toolkits.
ICAR is a CDC-sponsored program focused on supporting efforts to improve infection prevention and reduce Healthcare Associated Infections (HAI’s) in a variety of healthcare settings.
ICAR Program Overview

- 11 ICAR funded states.
- Washington is the only State taking a regional approach vs. state HAI program.
- There are two regional pilot sites in Washington: Clark County Public Health and Spokane Regional Health District.
- Each local health jurisdiction (LHJ) has designated ICAR leads in their respective jurisdictions.
What are health-care associated infections?

- HAIs are infections that people acquire while receiving treatment for another condition in a health care setting.

- The prevention of HAIs is a top priority of the U.S. Department of Health and Human Services (HHS).

- HAIs are the most frequent adverse event in health-care delivery worldwide. The impact of is significant, contributing to increased hospitalizations, financial burden, and potential loss of trust in healthcare.

- HAIs affect multiple healthcare settings and can spread in hospitals, nursing homes, rehabilitation facilities, clinics, or other clinical settings.

- At any given time, out of every 100 hospitalized patients, 7 in developed and 10 in developing countries will acquire at least one health care-associated infection.

### HAI Estimates Occurring in US Acute Care Hospitals, 2011

<table>
<thead>
<tr>
<th>Major Site of Infection</th>
<th>Estimated No.</th>
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<tbody>
<tr>
<td>Pneumonia</td>
<td>157,500</td>
</tr>
<tr>
<td>Gastrointestinal Illness</td>
<td>123,100</td>
</tr>
<tr>
<td>Urinary Tract Infections</td>
<td>93,300</td>
</tr>
<tr>
<td>Primary Bloodstream Infections</td>
<td>71,900</td>
</tr>
<tr>
<td>Surgical site infections from any inpatient surgery</td>
<td>157,500</td>
</tr>
<tr>
<td>Other types of infections</td>
<td>118,500</td>
</tr>
<tr>
<td>Estimated total number of infections in hospitals</td>
<td>721,800</td>
</tr>
</tbody>
</table>
Public health departments should lead coordination.

- Identify the health care facilities in the area and how they are connected.
- Dedicate staff to improve connections and coordination with health care facilities in the area.
- Work with CDC to use data for action to better prevent infections and improve antibiotic use in health care settings.
- Know the antibiotic resistance threats in the area and state.

SOURCE: CDC Vital Signs, August 2017
ICAR Program Goals

MISSION:
To reduce the number of HAI’s by enhancing the infection prevention and control capacity of healthcare facilities across the state of Washington, specifically focused on emerging infections and antimicrobial resistant organisms, through partnership building and education.

GOALS:

1. Build infection prevention expertise in ICAR Program staff through specialized professional development and integrate into Washington State public health system.

2. Establish a better understanding of facility and provider level infection prevention gaps through on-site assessment to inform development of program interventions and resources.

3. Improve collaboration among public health, health care facilities, and infection prevention-focused organizations to develop community standards for preventing and responding to HAI’s.

4. Bolster capacity for HAI surveillance and reporting across all healthcare facility settings to improve outbreak detection, targeted prevention activities and response.
Program Achievements

- Elected Co-Chair of the Southwest Washington HAI Task Force.
- Created a local health department toolkit for conducting facility based investigations of Carbapenemase Producing Carbapenem-Resistant Enterobacteriaceae (CP-CRE).
- Developed and hosted Infection Prevention LTCF Training in Clark County.
- Development of Infection Prevention improvement action plan template that outlines key deliverables and can be tailored to a facility specific Infection Prevention Risk Assessment and identified programmatic gaps.
- Construction of LTCF website folder- Influenza, VGE, Pneumococcal tools and guidance documents.
- Expanding ICAR program to neighboring LHJ by presenting LTCF training in collaboration with Cowlitz County LHJ and community partners.
QUESTIONS?
Resources

WHO

• Infection Control:
• http://www.who.int/gpsc/country_work/gpsc_ccisc_fact_sheet_en.pdf

Center for Disease Prevention and Control (CDC) and National Healthcare Safety Network (NHSN)
• http://www.cdc.gov/nhsn/