

OBJECTIVE

In caring for residents in long term care facilities (LTCF) Alberta clinicians will:

- Increase the accuracy of clinical diagnosis of NHAP
- Initiate timely treatment for NHAP
- Optimize use of laboratory and diagnostic imaging services in the diagnosis of NHAP
- Optimize use of antibiotics in the treatment of NHAP
- Ensure practices to prevent respiratory infections are in place in the LTCF
- Facilitate teamwork and communication in the evaluation and management of residents with NHAP

TARGET POPULATION

Patients with pneumonia acquired in a LTCF

LTCF is any congregate living environment for older and/or disabled persons that have high personal and professional care needs.

EXCLUSIONS

Hospital acquired pneumonia (HAP) (onset within 14 days of discharge from an acute care facility)

Aspiration pneumonia

Pneumonia in patients with cystic fibrosis, tuberculosis or bronchiectasis

RECOMMENDATIONS

- ✓ Ensure the LTCF initiates the [Nursing Home Acquired Pneumonia Checklist](#) when NHAP is suspected. The checklist will facilitate timely and accurate communication of relevant information among the care team.
- ✓ Diagnose NHAP when respiratory rate ≥ 25 bpm (counted for one full minute) plus any of the following are present:
 - Temperature $\geq 37.8^{\circ}\text{C}$ or 1.1°C above baseline
 - New/increased productive cough
 - Pleuritic chest pain
 - New/increased crackles, wheezes or bronchial breath sounds
 - New/increased abnormal findings on chest exam
 - New delirium or decreased level of consciousness
 - Dyspnea
 - Tachycardia
 - New/worsening hypoxemia

- ✓ Order chest X-ray if available (consider mobile units) for all residents with clinical findings consistent with pneumonia
- X DO NOT delay treatment pending results of chest X-ray
- X Consider the resident's history and co-morbidities
- ✓ Ensure treatment for NHAP is consistent with the resident's Goals of Care Designation and align treatment decisions prior to initiating treatment
- ✓ Administer antibiotics as soon as possible, i.e., within four to eight hours after the diagnosis of NHAP and prior to transfer to hospital if required
 - If transfer to hospital is required, draw blood cultures prior to starting antibiotics
- ✓ Select empiric antibiotic therapy for NHAP according to recommendations in [Bugs & Drugs](#) as microbiologic diagnosis of NHAP has significant limitations
- X DO NOT prescribe antibiotics for viral respiratory infections or for the prevention of NHAP. Inappropriate use of antibiotics leads to adverse patient outcomes and preventable increases in antimicrobial resistance in pathogenic and commensal bacterial flora.
- ✓ Provide oxygen therapy if O₂ saturation is <90%
- ✓ Ensure adequate hydration
 - Consider hypodermoclysis if hydration cannot be provided orally
- ✓ Consider transfer to acute care if any of the following apply:
 - Respiratory rate >40 bpm
 - Pulse >125 bpm
 - Systolic blood pressure <90 mmHg or decreased 20 mmHg below baseline
 - Adequate oxygenation or hydration cannot be achieved at the LTCF
 - Resident is hemodynamically unstable or is deteriorating rapidly
- ✓ Blood cultures should be drawn prior to starting antibiotics
 - DO NOT delay treatment pending results
- ✓ Institute measures to prevent viral respiratory tract infections (as these predispose to pneumonia) including:
 - Promote hand hygiene for staff, residents and visitors
 - Provide influenza and pneumococcal vaccination for residents
 - Encourage influenza vaccination for staff
 - Encourage staff/visitors to stay home if sick
 - Support smoking cessation and avoidance of second hand tobacco smoke for residents
 - Promote good oral hygiene for residents