

Respiratory Infections, Management and Antibiotic Use in Aged Care

Why Respiratory Infections are important in Aged Care

Respiratory infections are common in aged care and may be caused by viruses or bacteria. Older people are more vulnerable due to reduced immune function, chronic health conditions, swallowing difficulties/aspiration risk and close contact with others.

For aged care - Antimicrobial resistance

Antimicrobial Stewardship

Antimicrobial Stewardship (AMS) means only using antibiotics and other antimicrobial medications when they are needed, and using the right medication, at the right dose, for the right amount of time (often supported by pathology testing). Unnecessary antibiotic use can cause side effects and contributes to antimicrobial resistance (AMR), where bacteria become resistant to medicines, making infections harder to treat.

Antimicrobial Stewardship - Australian Commission on Safety and Quality in Health Care

Respiratory Infections and Antibiotic Use

Not every respiratory infection requires antibiotics. Antibiotics ONLY treat bacterial infections. They do not work against viruses, such as a common cold, influenza, COVID-19, most sore throats and most cases of acute bronchitis.

For aged care - Antimicrobial resistance

Vaccinations:

Vaccination is encouraged for residents, employees and visitors in residential aged care homes to reduce the impact of respiratory infections and illness (Influenza, COVID-19, RSV, Pneumococcal, etc.).

Hand Hygiene:

Hand Hygiene is a key factor in reducing the spread of respiratory infections in aged care.

5 Moments for Hand Hygiene

Condition	Cause + Vaccinations	Common symptoms	Treatment Options  = Vaccination available
Common cold	Viral (rhinovirus, adenovirus, seasonal coronavirus)	Sore throat, sneezing, runny nose, nasal congestion, mild cough	Antibiotics are generally NOT indicated. If it leads to complications like sinusitis, ear infection, pneumonia or COPD exacerbation antimicrobials may be required. Adenovirus may also lead to conjunctivitis. Fever is not associated with the common cold.
Acute bronchitis	Often viral	Cough, mucus production, shortness of breath	Antibiotics are generally NOT indicated for uncomplicated acute bronchitis.
Bacterial pneumonia	Bacterial (e.g. Pneumococcal) 	Cough, fever, mucus production, short of breath	Medical assessment required. Antibiotics may be prescribed if bacterial infection is suspected (3–5-day course depending on symptoms). Antibiotics 1 st line: amoxicillin 1 g, 8-hourly Antibiotics 2 nd line: doxycycline 100 mg, 12-hourly
Influenza	Viral 	Fever, body aches, cough, runny nose, fatigue, sore throat	Early medical assessment required for antiviral treatment. Antiviral 1 st line treatment: oseltamivir, 12-hourly for 5 days (dose adjustments required in renal impairment). Start within 48 hours (ideally within 24 hours) after symptom onset.
COVID-19	Viral 	Fever, sore throat, cough, short of breath, fatigue	Test promptly and arrange early antiviral assessment for eligible residents. Antiviral treatment: - nirmatrelvir and ritonavir (Paxlovid) - molnupiravir (Lagevrio)
RSV	Viral 	Runny or congested nose, cough, sore throat	Antibiotics are generally NOT indicated. Respiratory monitoring recommended. Escalate if the resident deteriorates.