health hub Education for health professionals

WEBINAR UPDATE | OCTOBER 2026

Urinary Tract Infections

CME review update: an addendum to the UTI webinar recording

~80%	~0.9	32%	122
decrease in total antibiotic use in aged care facilities	UTIs per 1,000 resident days in NZ aged care facilities	of US adult ED "UTI" diagnoses had urinary symptoms identified	CPE isolates in NZ in the first quarter of 2026 alone

Aged residential care: symptoms first, no dipsticks

The Health Quality & Safety Commission (HQSC) fully endorses and promotes the concept and practice of primarily using clinical symptoms (**dysuria and frequency**), and not dipsticks, in aged care facilities, at least for all residents who can communicate.

What this approach has achieved

- Total antibiotic use has fallen by around 80% in all the facilities and chains following this approach.
- UTI rates are down to an incredible ~0.9 per 1,000 resident days across rest home, hospital and special care in long-term care facilities (LTCFs). This is generally lower than community-only data, which generally excludes local hospital data.
- Residents' microbiomes remain largely intact, so they are 'microbially unperturbed and too dense/crowded' to easily foster multidrug-resistant organisms (MDROs) and their spread within the facility.
- Residents arriving or returning from local acute hospitals, where around 50% of all patients are on antibiotics at any one time and MDRO rates are higher, have significantly less chance of spreading these MDROs to others.

The New Zealand picture

Ryman Healthcare, the largest LTCF chain in New Zealand, has firm data on all the above. Even its MRSA rates are significantly lower than in the communities its facilities are located in, nationwide.

Collectively, LTCFs are effectively 'the largest extended hospital in NZ, with ~38,000 residents', and are often still perceived as having high antibiotic use and high associated MDRO rates. Yet by using a primarily

symptom-based approach to UTIs, with 0.9 UTIs per 1,000 resident days, New Zealand now arguably has the lowest LTCF UTI rates in the world.

New Zealand is currently the 5th highest user of antibiotics per person in the OECD. This rate could also be dramatically lowered if these policies were adopted more widely in the community.

All prescribers: adults under 65

For other adults under 65, be aware of chlamydia and other sexually transmitted infections (STIs). These are primarily infections of the urethra and cervix, not bladder cystitis.

Asymptomatic bacteriuria and pyuria (white blood cells) are also present in this population, rising from about 8% at age 20 to about 30% at age 65. The same principles as for long-term care residents apply: dipsticks greatly overcall UTIs.

Evidence from US emergency departments

Across **25.4 million** US adult emergency department (ED) visits over eight years in which 'UTI' was diagnosed, urinary symptoms were identified in only:

Patient group	ED 'UTI' visits with urinary symptoms identified
Adults	**32% only**
Older adults	**24% only**
Adults aged 85 and over	**17% only**

Source: Acad Emerg Med 2012 Oct;19(10):1173-80.

In other words, almost 70% of the 25 million diagnosed as 'UTI' would likely have received an unnecessary antibiotic course, laboratory culture, misdiagnosis and so on, largely based on false-positive dipstick testing, with or without culture overcalling.

~ 80% all LTCF residents have a positive dipstick, WBC +/- nitrites BUT no clinical symptoms. ~ 30 -50% of all have non immunogenic, asymptomatic bacteriuria, which is protective, preventing more virulent strains becoming established. Treating asymptomatic strains paradoxically increases clinical UTI rates!

Why it matters: antimicrobial resistance

MDROs are one of the greatest emerging international health challenges in the world, a 'slow pandemic', with the WHO estimating 10 million related deaths a year by 2050. The more we collectively use antibiotics unnecessarily, the sooner this limited resource becomes ineffective, with previously treatable infections more commonly not responding and leading to increased mortality rates.

The first identified carbapenemase-producing Enterobacterales (CPE) infection in New Zealand, almost pan-resistant, was in 2009. In the first quarter of 2026 alone, 122 were isolated in New Zealand, with an estimated seven times this number of asymptomatic, undetected carriers.

Think Global, Act Local

Before Prescribing

for our current and future good health