

## Ciprofloxacin – audit, initiatives and new guidelines

- Ciprofloxacin is a fluoroquinolone antibacterial valued for its activity against Gram-negative organisms.
- Its broad spectrum of microbial activity means that both appropriate and inappropriate use drive resistance.
- This bulletin discusses:
  - The PHARMAC restrictions designed to limit inappropriate use at DHBs across New Zealand (**blue box**).
  - An audit of ciprofloxacin use at CDHB hospitals for compliance with PHARMAC restrictions (**orange box**).
  - Initiatives to increase awareness of antimicrobial restrictions and guidelines (**pink box**).
  - New guidelines that have been developed to facilitate our compliance with the HML (**green box**).

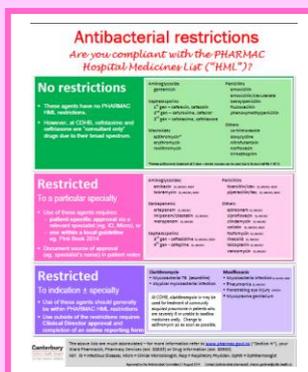
### PHARMAC restrictions

Hospital Medicines List (“HML” or “Section H”) restrictions mean that ciprofloxacin may only be prescribed by or under the recommendation of an Infectious Diseases (ID) Physician or Clinical Microbiologist. This requires:

- ❖ *patient-specific* approval by one of these specialists, or
- ❖ *prescribing within a CDHB approved antimicrobial guideline* such as the Pink Book 2014.

There must be clear documentation of the specialist’s name or CDHB antimicrobial guideline that supports ciprofloxacin use in the patient’s clinical notes.

### New initiatives to help with restrictions & “smart” antimicrobial use



#### POSTER ~ Antimicrobial Restrictions

PHARMAC HML restrictions are trickier to remember than QID dosing on an empty stomach...

This poster outlining key antibacterial restrictions is coming soon to your ward.

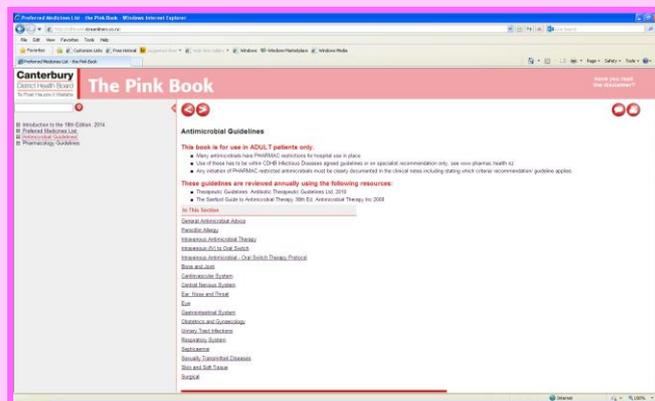
### Ciprofloxacin use at CDHB hospitals A snapshot of HML compliance

- 57 inpatients were identified as having ciprofloxacin at some point over a two week period in February 2014.
- 33 cases (58%) were HML compliant.
- 24 cases (42%) were non-compliant with no evidence of:
  - ID or Clinical Microbiologist approval, or
  - use of CDHB approved antimicrobial guidelines eg. Pink Book, Blue Book, Red Book or ICU guidelines.
- General Surgery was the biggest user (26%) followed by General Medicine (18%) (see Table).
- A team approach to guideline development may help address some of the gaps in HML compliance.

	Number of patients (n=57)	
	Prescribed ciprofloxacin	Non compliant with the HML
General Surgery	15 (26%)	11 of 15 (73%)
General Medicine	10 (18%)	1 of 10 (10%)
Haematology	8 (14%)	1 of 8 (13%)
Urology	6 (11%)	4 of 6 (67%)
Orthopaedics	4 (7%)	1 of 4 (25%)
Intensive Care	3 (5%)	0 of 3 (0%)

#### Minor uses of ciprofloxacin in this audit:

- Respiratory, Oncology and Princess Margaret hospital each had 2 patients
- Cardiology, Otolaryngology, Plastics, Neurosurgery, Gastro each had 1 patient



#### PINK BOOK ~ New Electronic Version

CDHB’s antimicrobial guidelines are in the Pink Book which is now in a more “user-friendly” electronic format on the Intranet.

### New ciprofloxacin guidelines

- Use of CDHB guidelines (ID/Clinical Microbiology approved) avoids the need to specifically consult with these specialities to meet HML restrictions.
- The Antimicrobial Committee has developed new guidelines (eg. prostatitis) to support ciprofloxacin use where appropriate.
- If you would like help with ciprofloxacin use, please contact your ward pharmacist or the antimicrobial pharmacist (sharon.gardiner@cdhb.health.nz).