

# MULTI DRUG RESISTANT ORGANISMS (MDROs)

MDROs are highly resistant bacteria including, but not limited to: methicillin-resistant Staphylococcus aureus (MRSA), vancomycin-resistant enterococci (VRE ), Carbapenemase resistant enterobacteracea (CPE) and multidrug-resistant Gram-negative bacilli (GNB) which may include Escherichia coli, Klebsiella pneumoniae, and Pseudomonas aeruginosa.

### What is the clinical impact of MDROs?

- MDROs can be easily transferred among patients.
- Many MDROs can be difficult to treat.
- Patients with MDROs are at a greater risk of developing poor health outcomes.

Resistance can occur by multiple mechanisms depending on the type of the organism.



### Who is at risk?

- Patients receiving prolonged or repeated courses of antibiotics.
- Patients with prolonged medical care.
- Residents with weakened immune system.
- Patients with in-dwelling medical devices such as urinary catheters, endotracheal tubes or central venous catheters
- Patients that have had repeated hospital stays.

### What can be done to prevent the spread of MDROs?

- Strict hand hygiene to prevent cross infection.
- Use of protective clothing.
- Isolation precautions if advised by the infection control nurses.
- Cleaning programme.
- Care with antibiotic prescribing. Use Pan Mersey antibiotic guidance.
- Obtaining samples so correct antibiotics given.
- Care of indwelling devices.
- Provide patient and carer education about MDROs.



**Be alert** –for resistant organisms.  
**Share information** – between care home, hospital, GP and other health professionals.  
**Get Infection control practice right!**  
 – do the basics AND do them well  
**Antimicrobial prescribing** – care with this. Ensure resident is diagnosed and treated appropriately.