## Spread of superbugs

- Harder to treat
- Resistant strains
- May also have more side effects
- Dominate in hospital settings

## Clostridium difficile

- The overuse and misuse of antibiotics kills the normal flora of bacteria in the body. This causes C.difficile to take over and release toxins.
- Strains acquiring antibiotic resistance killed 5X more than MRSA in 2007.
- In 2004 Reporting of such cases became mandatory

## Glycopeptide resistant enterococci (GRE)

- E. faecalis (more prevalent) and faecium cause 95% of the infections in mainly the young (<1y) and the elderly i.e. immunocompromised
- Found in digestive system and urinary tract
- Cause wound infections, pelvic/abdominal infections, bacteraemia (presence of bacteria in the blood)
- Resistant to many antibiotics resistance acquired by conjugation they acquire a Beta lactamase

## Resistance shown by enterococci

- VAN-A VRE- resistant to both vancomycin and teicoplanin
- VAN-B VRE resistant to vancomycin but sensitive to eicoplanin
  VAN-C VRE partially resistant to vancomyclical sensitive to teicoplanin teicoplanin

Carbapenem-resistant en

Proof gut flora, also Quo Poil and water Becoming resistant to most antibiotics