

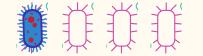
Did you know some superbugs are stronger than others?



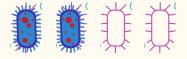




### Levels of AMR



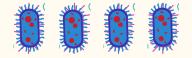
MDR (Multi-Drug Resistance)



DTR (Difficult-to-Treat Resistance)



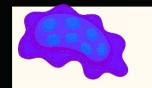
XDR (eXtensive Drug Resistance)



PDR (Pan Drug Resistance)





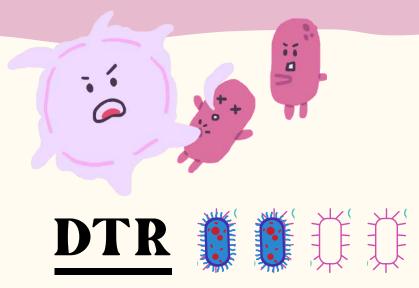




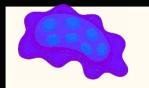


# MDR ###

Multi-Drug Resistant bacteria are those that have acquired resistance to multiple classes of antimicrobials such as antibiotics.

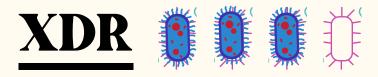


Difficult-to-Treat Resistance is a newly introduced term that is used to define bacteria that have developed resistance to all of the typical first-line, lower toxicity agents. This term has not been clinically designated yet.









eXtensively Drug Resistant bacterial strains are those that can't be treated with most antibiotics, but one or two types may still work.

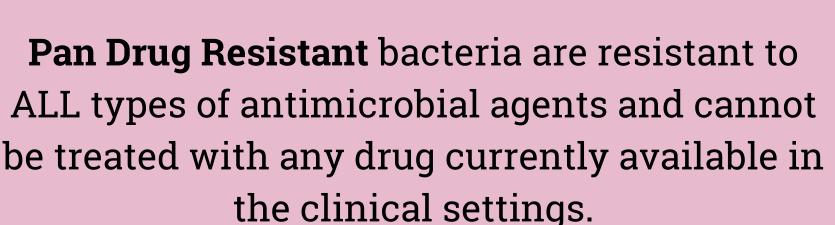










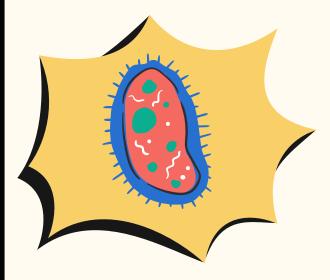






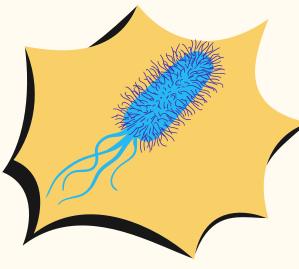
## **Major Superbugs**

(And the disease they cause)



Acinetobacter baumannii (MDR,PDR)

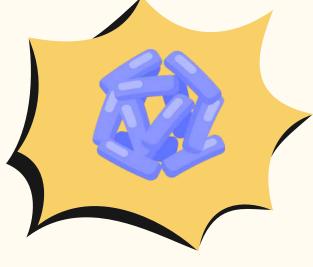
- Skin and soft tissue infections
- Urinary tract infections
- Meningitis
- Hospital-acquired infections



Pseudomonas aeruginosa (PDR,XDR)



- Hospital-acquired infections
- Meningitis
- Pneumonia
- Septicemia

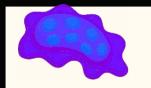


Klebsiella pneumonia (MDR,PDR,XDR)



- Pneumonia
- Urinary tract infections
- Bloodstream infections, in immunocompromised people



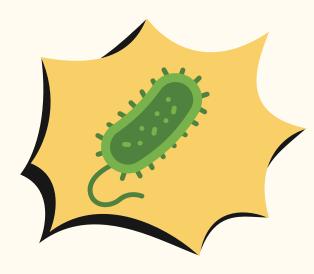






## **Major Superbugs**

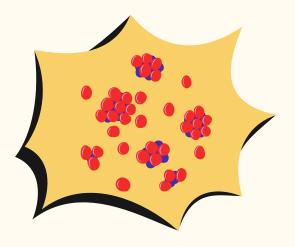
(And the disease they cause)



Escherichia coli (E. Coli) (MDR)



- Diarrhea
- Respiratory illness
- Gastroenteritis
- Hemorrhagic colitis



Staphylococcus aureus (MDR)



- Staph infections such as:
- Skin Infections
- Food poisoning
- Toxic shock syndrome
- Septic arthritis











#### Why should we care about Superbugs?

Antimicrobial Resistance or AMR occurs when microbes, like bacteria, evolve to resist antibiotics that are designed to kill them. The drug-resistant bacteria develop biological mechanisms that render antibiotics ineffective which makes treating infections and performing life-saving procedures a challenging task.

AMR is a rising **global public health** concern that has contributed to over **4.95 million deaths** and thus needs immediate attention and collective action from everyone.

#### How do we stop the rise of Superbugs?

- Use antimicrobials/antibiotics only when recommended by healthcare professional and follow the prescribed treatment regimen carefully.
- Maintain good hygiene, promote clean water and sanitation and get the necessary vaccinations to prevent infections.
- Stay informed about AMR and spread awareness in personal and professional circles.



