Five bacteria types caused 6.8 lakh deaths in India in 2019

November 23, 2022

<u>In news</u>— According to a study published in The Lancet journal, 5 bacteria types- *E. coli, S. pneumoniae, K. pneumoniae, S. aureus and A. baumanii* caused nearly 6.8 lakh deaths in India in 2019.

Key findings-

- The analysis found that common bacterial infections were the second-leading cause of death in 2019, and were linked to one in eight deaths globally.
- There were 7.7 million (77 lakh) deaths in 2019 associated with 33 common bacterial infections, with five bacteria alone connected to more than half of all deaths, the researchers said.
- The deadliest bacterial pathogens and types of infection varied by location and age.
- Globally, bacterial infections were second only to ischemic heart disease as the leading cause of death in 2019.
- These new data for the first time reveal the full extent of the global public health challenge posed by bacterial infections.
- While many estimates exist for pathogens such as tuberculosis, malaria, and HIV, until now, estimates of the disease burden of bacterial pathogens were limited to a handful of specific pathogens and types of infection, or focused only on specific populations, the researchers said.
- More deaths were linked to two of the deadliest pathogens — S. aureus and E. coli — than HIV/AIDS

- (864,000 deaths) in 2019.
- The new study provides the first global estimates of mortality associated with 33 common bacterial pathogens and 11 major infection types — known as infectious syndromes — leading to death from sepsis.

More information of 5 bacteria-

- E. Coli was the most deadly pathogen, claiming 1.57 lakh lives in India in 2019.
- S. pneumoniae- Streptococcus pneumoniae are lancetshaped, gram-positive, facultative anaerobic bacteria with more than 100 known serotypes. Most S. pneumoniae serotypes can cause disease, but only a minority of serotypes produce the majority of pneumococcal infections.
- *K. pneumoniae-* It is a type of Gram-negative bacteria that can cause different types of healthcare-associated infections, including pneumonia, bloodstream infections, wound or surgical site infections, and meningitis.
- S. aureus- It has long been recognized as one of the most important bacteria that cause disease in humans. It is the leading cause of skin and soft tissue infections such as abscesses (boils), furuncles, and cellulitis. Although most staph infections are not serious, S.
- A. baumanii Acinetobacter baumannii can cause infections in the blood, urinary tract, and lungs (pneumonia), or in wounds in other parts of the body. It can also "colonize" or live in a patient without causing infections or symptoms, especially in respiratory secretions (sputum) or open wounds.