

# Global Antimicrobial Resistance and Use Surveillance System (GLASS) report-2022

December 12, 2022

**In news**– World Health Organization (WHO) has released the GLASS report-2022 recently.

**What does the report say?**

- As per the report, the spectre of untreatable disease, caused by Antimicrobial Resistance (AMR), ravaging humanity is inching closer.
- **For the first time, the GLASS report provided analyses for antimicrobial resistance (AMR) rates** in the context of national testing coverage, AMR trends since 2017, and data on antimicrobial consumption in humans in 27 countries.
- Within six years, GLASS achieved participation from 127 countries with 72% of the world's population. The report includes an innovative interactive digital format to facilitate data extraction and graphics.
- **The report shows high levels (above 50%) of resistance were reported in bacteria frequently** causing bloodstream infections in hospitals, such as *Klebsiella pneumoniae* and *Acinetobacter spp.*
- These life-threatening infections require treatment with last-resort antibiotics, such as carbapenems.
- However, **8% of bloodstream infections caused by *Klebsiella pneumoniae*** were reported as resistant to carbapenems, increasing the risk of death due to unmanageable infections.
- **Over 60 per cent of *Neisseria gonorrhoea* infections, a common sexually transmitted disease,** show resistance to

ciprofloxacin, one of the most widely used oral antibacterials.

- And over 20 percent of *E.coli* isolates, the most common pathogen in urinary tract infections, were resistant to ampicillin and co-trimoxazole, first-line drugs, as well as second-line treatments known as fluoroquinolones.
- Although most antimicrobial resistance trends have remained stable over the past four years, bloodstream infections due to resistant *E.coli*, *Salmonella* and *gonorrhoea* infections, have jumped by at least 15 per cent compared to 2017 rates.

## What is AMR?

Antimicrobial resistance occurs when microbes evolve mechanisms that protect them from the effects of antimicrobials. All classes of microbes can evolve resistance. Fungi evolve antifungal resistance. Viruses evolve antiviral resistance.

