

Deadly superbug in Andamans (Candida Auris)

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In News: A deadly hospital pathogen, the Candida Auris, has for the first time been identified in the environment, off the coast of South Andaman district in the Andaman and Nicobar islands.

About Candida Auris

- The study, carried out by the Vallabhbhai Patel Chest Institute, has for the first time established that the fungus is found in tropical marshes and marine environments, outside hospital environments.
- C. auris is a fungus that was first discovered in 2009 in a patient in Japan. Quickly spread around the world, appearing on three different continents around the same time.
- Microbe can cause serious bloodstream infections, particularly in patients who require catheters, feeding tubes or breathing tubes, according to the Centers for Disease Control and Prevention (CDC).
- The infections can be difficult to treat because the microbe is often resistant to multiple antifungal drugs; and it can also linger on environmental surfaces.
- Although related species have been detected in plants and aquatic environments, C. auris hasn't been found in natural environments.
- Casadevall and colleagues have previously hypothesized that increased temperatures due to climate change may have caused C. auris to adapt to higher temperatures in the wild, and thus allowed the fungus to make the jump to humans, whose normal body temperature is typically too hot for most fungi to survive.
- The C.auris can be deadly for immunocompromised

patients. While incidence of patients dying from this fungal infection has been found to be higher in other countries, such as the US and the UK, its prevalence is less in Indian hospitals.

Superbugs

- Term used to describe strains of bacteria that are resistant to the majority of antibiotics commonly used today.
- Resistant bacteria that cause pneumonia, urinary tract infections and skin infections are just a few of the dangers.
- Antimicrobial resistance (AMR) is the ability of a microorganism (like bacteria, viruses, and some parasites) to stop an antimicrobial drug (such as antibiotics, antivirals and antimalarials) from working against it.
- As a result, standard treatments become ineffective, infections persist and may spread to others.
- A superbug is a strain of bacteria that has developed extreme AMR i.e become resistant to all available antibiotic drugs.

About Vallabhbhai Patel Chest Institute (VPCI)

- The Vallabhbhai Patel Chest Institute (VPCI) is a unique postgraduate medical institution devoted to the study of chest diseases.
- It is a University of Delhi maintained institution and is funded entirely by the Ministry of Health and Family Welfare, Government of India.
- The institute is ideally located in the heart of the main campus of the University of Delhi, providing the requisite academic environment.
- The Institute fulfills the national need for providing relief to a large number of patients in the community suffering from chest diseases.

- It has eminently discharged its role and has earned a unique place in the field of Chest Medicine.

Objectives of VPCI

- To conduct research on basic and clinical aspects of chest medicine, to train post graduates in Pulmonary Medicine and allied subjects,
- To develop new diagnostic technology and disseminate scientific knowledge related to Chest Medicine to other institutions in the country
- To provide specialized clinical and investigative services to patients.