Hantavirus

Why in News?

The recent passing of Betsy Hackman, wife of renowned American actor Gene Hackman, has drawn attention to deadly Hantavirus.

- **Cause** – It is a family of viruses carried by certain rodents, such as deer mice, white-footed mice, rice rats, and cotton rats.
- **Transmission** - Humans typically contract Hantavirus through contact with infected rodent urine, droppings, and saliva.
- The most common way the virus spreads is through ***aerosolisation,*** when fresh rodent waste is disturbed, the virus particles become airborne and can be inhaled.
- This often happens during activities like sweeping infested areas, cleaning long-closed spaces such as sheds, or handling contaminated materials.
- Additionally, Hantavirus can enter the body if a person touches their eyes, nose, or mouth after handling contaminated materials or if the virus enters an open wound.
- Though extremely rare, the virus can also spread through rodent bites.
- They do not typically transmit from person to person, although rare cases of human-to-human transmission have been reported with certain strains, such as the Andes virus.
- **Strains -** Several strains exhibiting varying degrees of severity.
- **Stages - Prodromal phase -** Appears one to eight weeks after exposure.
- It begins with flu-like symptoms such as fever, chills, muscle aches (often in the thighs, hips, and back), fatigue, headaches, and abdominal pain. Nausea, vomiting, and diarrhea may also occur.
- **Second Phase -** Signals the onset of HPS, brings more severe symptoms.
- These include a sudden shortness of breath, coughing, and chest tightness as the lungs fill with fluid.
- This stage can escalate quickly, causing acute respiratory distress and, in some cases, heart failure. Without prompt medical intervention, the condition can be fatal.
- **High risk groups -** People who live or work in areas where rodent populations are more prominent. This includes farmers, construction workers, and those involved in cleaning old or unused spaces.

- It also includes children under 5, pregnant women, and individuals with weakened immune systems.
- **Prevention –** It remains the most effective way to combat hantavirus.
    - Keeping homes and workplaces rodent-free by sealing entry points,
    - Safely disposing of food and garbage, and
    - Wearing protective gear when cleaning areas with rodent activity can significantly reduce the risk.
- **Treatment -** Currently, there is no specific antiviral treatment or cure for Hantavirus.
- Patients are often given oxygen therapy to ease breathing difficulties. Severe cases may require intensive care, including mechanical ventilation to assist lung function.

Reference

The Hindu | Hantavirus

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