

## **4. Multi-system Inflammatory State Requiring Intensive Care**

**Prelims Syllabus:** Science & Technology

**Mains Syllabus:** GS-III Science & Technology - Awareness in the Fields of IT, Space, Computers, Robotics, Nano-Technology, Bio-Technology

### **Why in News?**

- Recently, the Paediatric Intensive Care Society (PICS) in the United Kingdom (UK) had observed an apparent rise in the number of children (of all ages) with a “multi-system inflammatory state requiring intensive care”.

### **Highlights:**

- Children in the UK are reportedly falling ill with symptoms of high fever and swollen arteries, and doctors believe it could be coronavirus-related.
- According to the PICS, there is a growing concern of a SARS-CoV-2 related inflammatory syndrome emerging in children in the UK or that there may be another unidentified infectious pathogen associated with these cases.
- The National Health Service (NHS) has issued a nation-wide alert, and asked doctors to urgently report any cases with similar symptoms.
- Not just the UK, doctors in Italy and Spain have also alerted authorities of similar cases.

### **Multi-system Inflammatory State:**

- This rare illness causes inflammation of the blood vessels, which leads to low Blood Pressure.
- It affects the entire body as it causes a build-up of fluid in the Lungs and other Organs.
- This condition is similar to Kawasaki disease. Patients suffering from it Require Intensive care to support the lungs, heart and other organs, according to The Guardian.

### **Symptoms:**

- Children were showing abdominal and gastrointestinal symptoms as well as cardiac inflammation.
- According to PICS, there were also overlapping symptoms of toxic shock syndrome and a typical Kawasaki disease.

### **Toxic Shock Syndrome (TSS):**

- It is a rare life-threatening condition caused when certain bacteria enter the body and release harmful toxins. If not treated in time, the condition could be fatal.

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- Symptoms include high temperature, flu-like symptoms including Headache, Sore Throat, Cough, Diarrhea, Dizziness or Fainting, Difficulty Breathing and Confusion.
  - Some patients suffering from TSS may need ICU admissions.

**Kawasaki Disease:**

- It is an acute inflammatory disease of the blood vessels and usually occurs in children below the age of five.
- The inflammation caused by the disease affects many parts of the body but has a more serious effect on the heart since it causes inflammation in the coronary arteries that are responsible for supplying blood to the heart.
- This results in enlargement or in the formation of aneurysms that can lead to heart attacks. Symptoms include Fever, changes in Extremities, Rashes, Redness of the Cornea, Red and cracked lips, a red tongue and lymph node Enlargement of the Neck.

