

# Mission to eliminate sickle cell anaemia by 2047

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**In news**– The Union Finance Minister has announced her government's plan to launch a mission to eliminate sickle cell anaemia by 2047.

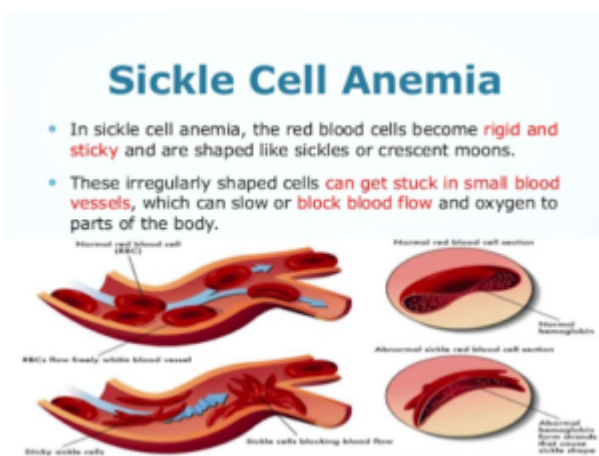
## About the mission-

It will entail awareness creation, universal screening of seven crore people in the age group of 0-40 years in affected tribal areas and counselling through collaborative efforts of central ministries and state governments.

## What is Sickle cell disease (SCD)?

- **It is an inherited group of blood disorders that is genetic in nature.**
- It is usually **transferred from the parents to the child during birth i.e. both parents can be carriers of SCDs.**
- The infection turns the RBCs from round flexible discs into stiff and sticky sickled cells.
- As a result, the blood doesn't have enough red blood cells anymore and the affected person develops anemia, a condition when your body is not able to carry adequate oxygen to the tissues.
- The sickle cells die prematurely, resulting in a **chronic lack of red blood cells.**
- Furthermore, as they pass through small blood arteries, they become caught and obstruct the blood flow.
- **This can result in discomfort as well as other dangerous consequences (health issues) such as infection, acute chest syndrome, and stroke.**
- Babies with sickle cell anaemia may not exhibit symptoms for several months after birth.

- The **symptoms of anaemia, however, include excessive weariness or fussiness**, excruciatingly swollen hands and feet, and jaundice.
- **Babies may also suffer spleen damage**, which weakens their immune system and increases their susceptibility to bacterial infections.
- People with sickle cell anaemia may have various and increasingly significant medical problems as they age, which occur when organ tissues do not receive enough oxygen.



### Diagnosing sickle cell disease-

- A blood test can determine whether you have SCD or sickle cell trait.
- People who are considering having children can get the test to determine the likelihood of their offspring having SCD.
- SCD can also be diagnosed before a baby is born. A sample of amniotic fluid (the fluids in the sac around the foetus) or placental tissue is used in this test (the organ that brings oxygen and nutrients to the baby).

### Treatment therapies-

- SCD can only be cured by bone marrow or stem cell transplantation.
- These transplants are normally reserved for children

with severe SCD since they are hazardous and can have substantial adverse effects.

- The bone marrow must be a close match for the transplant to succeed. A brother or sister is usually the ideal donor.