IIT-I develops portable vax carrier with temp control



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IIT Indore has developed a portable, standalone vaccine carrier with temperature control, remote temperature monitoring, and location tracking system.

Usually, a vaccine carrier system is based on passive cooling, using well-insulated containers, and ice packs, making the systems heavy, and restricted by the duration of the ice life.

Dr Shilpa Raut, senior medical officer, IIT Indore, has developed a vaccine carrier box which can control and maintain temperature of the carrier box between 2 and 8 degree for prolonged duration.

The temperature is maintained with a thermoelectric cooler and temperature controller. It has a temperature display and remote temperature monitoring system. A location tracker is attached to the vaccine carrier box to track location of the box.

This can be very useful in any vaccination program, which requires a cold chain including Covid 19 vaccination. Currently, remote temperature monitoring and location tracker systems are not available with any vaccine carrier box.

Thus, the data of the reach of vaccination programs is not easily available. Similarly, there is no remote centralized temperature monitoring system for vaccination. The peripheral health workers in the vaccination program have to return from remote locations as there is a possibility of ice melting before completion of the vaccination drive.

This module will help the health care workers to complete their target vaccination even in remote locations and provide district administration with a record of temperature of vaccine carriers and reach of vaccination. This vaccine carrier box is also useful for cold chain maintenance for biological specimens.