

## COVID-19: IIT-H suggests cheaper alternative to ventilators



HYDERABAD: The Indian Institute of Technology at Hyderabad (IITH) has suggested an affordable, portable and fast-to-make alternative to ventilators that can be produced in bulk for less than Rs. 5,000 a device to fight the Covid-19 outbreak.

The small device, called ‘bag valve masks’, is used to deliver breathing support in emergency situations and is easy to produce to meet the current crisis, it said on Monday.

The bag valve mask, known by the proprietary name Ambu Bag, is a hand-held device or manual resuscitator commonly used to provide positive pressure ventilation to patients not getting adequate breath.

While a ‘bag valve mask’ is currently hand-powered and, therefore, not suitable for continuous use as a ventilator, it will be easy to design a similar device powered by an electrical source, which could be a car battery apart from the conventional power supply. It could be made portable, and, therefore, adopted in villages and other areas without a power supply and be inexpensive enough to manufacture in bulk, said IITH.

“Our estimate of the cost is that it can be manufactured for less than Rs 5,000, or one-hundredth the cost of a conventional machine,” said Prof BS Murty, director, IIT Hyderabad, and Prof V Eswaran, department of mechanical and aerospace engineering, IIT Hyderabad, elaborating on the advantages of the affordable alternative to ventilators.

Source: Economic Times

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