

New Ventilator Challenge devices arrive in UK

A batch of new ventilators from the Government's Ventilator Challenge has arrived in the UK this week to continue supporting NHS patients with coronavirus.

150 devices, made up of the Vivo65 and the Nippy4+ ventilators from Breas Medical, arrived this week from Sweden.

The new ventilators are existing designs, already approved by regulators, and the Cabinet Office has assisted the Swedish company Breas Medical, who also operate in Stratford-Upon-Avon, to ramp up the production of their ventilators, by supporting new production lines, negotiating with suppliers to source critical components and expediting shipments of key parts from around the world.

The existing products have proven to be clinically excellent in a number of different settings. The Government has ordered 2000 of the devices, with hundreds expected to arrive over the coming weeks.

The Vivo65 and the Nippy4+ ventilators join the Penlon Prima ES02 and the Smiths paraPAC models as Ventilator Challenge devices which are available to the NHS.

Chancellor of the Duchy of Lancaster Michael Gove said:

The arrival of the Breas Medical devices further underlines the Ventilator Challenge's success in stepping up the number of ventilators in the UK.

These devices are well suited to helping patients in intensive care and will complement the two other Ventilator Challenge devices currently on the NHS frontline.

We are also hugely grateful to those companies that will not be progressing further in the Ventilator Challenge. They can be proud of the part they played in the national effort to protect the NHS and save lives.

A further 449 Ventilator Challenge devices are now available to the NHS frontline, with hundreds more arriving over the coming weeks. Government efforts to increase ventilator capacity have already seen an additional 2,600 mechanical ventilators made available to the NHS since the start of the pandemic. The UK now has over 11,000 mechanical invasive ventilators available in total.

During the coronavirus pandemic, everyone who has required a ventilator has

had access to one, but the Government will continue to increase capacity through its three pillar strategy: procuring more ventilators from overseas, scaling up the production of existing or modified designs and working to design and manufacture new devices.

Today the Cabinet Office has also confirmed that, following re-assessment from a panel of expert clinicians, the department is ending support for the following devices:

- Piran Vent, made by Swagelok
- Veloci-Vent, made by Cambridge Consultants Ltd and MetLase
- CoVent, made by TTP and Dyson
- Sagentia Ventilator, made by Sagentia
- AirCare, made by BAE Systems

All five designs have made exceptional progress since the start of the Ventilator Challenge, with a number of devices having been assessed as having viable designs by expert clinicians. However they would require further development before they would be ready for clinical testing, and they are not currently required to meet immediate demand. Companies may continue to develop their designs, including for CE-marking.

Director, Medical Devices Testing and Evaluation Centre, Dr Tom Clutton-Brock said:

Having tested all of the new devices in the Ventilator Challenge, it's fantastic to see that so many designs have come a long way in such a short period of time. Designing and testing ventilators usually takes years and it's a testament to the perseverance and ingenuity of the companies involved that so much has been accomplished. While some of the new designs are no longer being supported, several designs are very close to being clinically viable pandemic ventilators.

As set out last week, the Government will continue to provide support to the following devices:

- Penlon Prima ES02
- Smiths paraPAC
- Breas Medical Nippy 4+ & Vivo65

In addition, two devices are subject to ongoing review to ensure that they continue to meet the needs of the NHS:

- Zephyr Plus, made by Babcock
- Gemini, made by OES Medical

The Government recently announced that 15,000 Penlon Prima ES02 ventilators have been ordered, the first newly-adapted device to receive regulatory approval in the Ventilator Challenge, with production set to ramp up in the coming weeks. Smiths paraPAC ventilators, an existing device, are also being

manufactured at speed and at scale as part of the Ventilator Challenge.

Devices that have been selected to continue as part of the Ventilator Challenge have been selected based upon expert clinical and technical advice. This includes feedback from rigorous testing of the ventilators by clinical experts to ensure that they meet the necessary standards for patient safety and effectiveness of treatment, which is of vital importance for any new ventilator design. This selection criteria also takes into account projections for ventilator demand, the availability of other devices which already have regulatory approval, the performance and clinical usefulness of each device and the progress to date on each device's overall development.