

Scientists and industry are dashing to make more ventilators

One of the most worrying symptoms of COVID-19 is the way the coronavirus attacks the lungs of those infected. This means some patients need a **ventilator** to help them breathe until their lungs recover. But there is a **dire** shortage of these machines in hospitals, so **intensive-care units** will be overwhelmed.

ventilator 通风机; 呼吸机

dire 可怕的; 悲惨的

intensive-care unit ICU

ramping 升温; 炒高

So what chance do science and industry have of dramatically **ramping** up production?

Existing producers are stretching themselves. Hamilton Medical, a Swiss firm that is one of the biggest manufacturers of ventilators, usually turns out 220 machines a week and hopes to double that by the end of April. Siare Engineering in Italy produces 160 ventilators a month and aims to triple that with the help of army technicians.

A number of industry groups have got together in response to a request by the British government for 5, 000 new ventilators as soon as possible. One group is led by Meggitt, an aerospace firm based in Britain that among other things also makes oxygen systems for aircraft. Another group is led by McLaren, a super-car-maker that runs a Formula 1 team. Like others involved in motorsport, McLaren is expert at **prototyping** and manufacturing things rapidly.

prototyping 原型设计

Other firms are getting involved. Dyson, a British maker of vacuum cleaners, says it has a potential order for 10, 000 versions of a ventilator it has developed.

Lots of academics are helping. Engineers and doctors from the University of Oxford and King's College London hope to have prototypes of a simple ventilator that would cost less than £1, 000 approved and working in trials at hospitals in London and Oxford in about two weeks.