

## ONE METRE OR TWO?



**THE** prime minister, Boris Johnson, has said he wants to reduce the COVID-19 2m social distancing rule.

The Chief Medical Officer, who advises the Government on the new virus, says the rule needs to stay in place for as long as the pandemic continues. The World Health Organization (WHO), on the other hand, says 1m is enough. In many countries, the rule is 1.5m.

The measure is in place because the closer you are to someone who is infected, the greater the risk of catching the virus. So why does Mr Johnson – and some businesses and MPs – want to reduce the UK's 2m rule?

It would make it easier for shops, restaurants, bars, factories and other businesses if people could stand just 1m or 1.5m apart. It means you could fit more people into a space.

But a new study published in medical journal *The Lancet* doesn't back the WHO or Mr Johnson. Researchers found that the risk of being infected is 13% within 1m, but just 3% beyond that distance.

The study also found that, for every extra metre of distance up to 3m, the risk is reduced by half. So being 1m away from another person could be twice as risky as being 2m away.



An empty London street during lockdown

## LOCKDOWN HELPS LUNGS

**THE COVID-19 lockdown has improved the health of nearly two million people in the UK with lung conditions.**

Although the restrictions have been hard for many of us, there have been some positive outcomes for the environment, including a massive reduction in air pollution. As fewer people have gone out in their cars, our air has become cleaner.

This has meant people who live with serious lung problems such as asthma and chronic pulmonary disease have noticed significant improvements in their conditions.

The British Lung Foundation (BLF) surveyed 14,000 people in the UK with lung conditions. They found that one in six (16.2%) had noticed improvements in their health during lockdown. That works out at 1.94 million people. Visits to hospital for asthma have fallen by half during lockdown in the UK too.

There is a direct link between air pollution and lung problems. When the air quality is particularly bad, it can make lung conditions worse and lead to people having to go to hospital. But the good news is there has been a significant fall in pollution since the lockdown began in late March; scientists say there has been a 40% decrease in nitrogen dioxide (NO<sub>2</sub>) levels. NO<sub>2</sub> is a gas emitted by cars, trucks, buses and power plants. It's especially bad for people with asthma, as it can worsen symptoms.

One in five parents of a child with a lung condition said they noticed an improvement to their child's symptoms, and 83% said air pollution should be a priority for the Government.

Paul, aged 14, has suffered from asthma since he was five. He told the BLF he could really feel a difference during lockdown: "I walk out, and I'm hit with clean air. This lockdown, in my eyes, has been really beneficial for highlighting the main sources of our air pollution problem, which has made me really happy."

Tens of thousands of deaths every year are linked to air pollution, and it can cause a wide range of health problems, including lung disease, heart disease and cancer.



An asthma sufferer

## DRUG STUDY WITHDRAWN

**TWO** weeks ago we reported on a study that showed a potential treatment drug for COVID-19 had caused deaths.

Now, that study into hydroxy-chloroquine has been withdrawn by the researchers behind it. They say they cannot be sure the data used in the research is accurate.

In fact, it seems the data is likely to be highly inaccurate, which has proved embarrassing for the study's authors.

The drug, which is used to treat malaria, received a lot of attention after President Trump praised it as a treatment for COVID-19, and said he had taken it. But, despite this latest study being withdrawn, the evidence so far suggests hydroxychloroquine probably doesn't work.

Last week, a University of Oxford trial was ended after hydroxychloroquine was found to have no effect on COVID-19. The study involved more than 11,000 patients from 175 NHS hospitals. There was no benefit to hospital patients who were given the drug, and it didn't help prevent very sick patients from dying.

However, thousands of scientists around the world are working hard to find treatments that do work.



Getty

TATA  
CONSULTANCY  
SERVICES

## INNOVATIONS

**BLIND** people can read Braille in mid-air now, thanks to speakers that give off ultrasound waves.

Braille (right) is a printed reading and writing system that uses raised dots to represent the letters of the alphabet.

Now, scientists at the University of Bayreuth in Germany have developed a device that creates points in the air that are similar to Braille dots.

These mid-air dots can be felt on a person's hand if they hold it 20cm from the device, which contains 256 tiny speakers.

Tests involving 11 blind people found they all correctly identified nearly 90% of Braille characters.



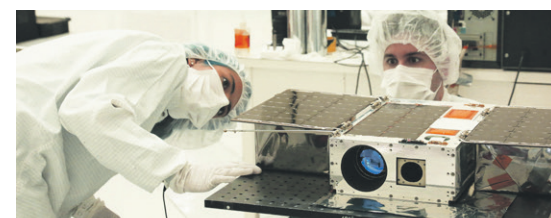
istock

## TINY SAT SPOTS HUGE PLANET

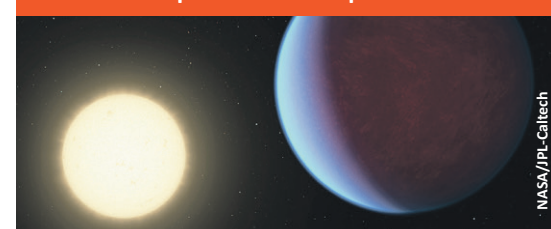
**A PLANET** has been detected by a satellite the size of a briefcase!

Known as ASTERIA, the satellite (right) has been roaming the Earth in low orbit since 2017. It spotted a super-hot planet, which is twice the size of Earth, by recording dips in the brightness of a star caused by the planet passing in front of it.

Scientists then measured the data and compared it to previous observations. That confirmed tiny ASTERIA had spotted a world named 55 Cancri e.



An artist's impression of the planet and its sun



NASA/JPL-Caltech