THE END OF FREE COVID TESTING

Following the government's announcement that free COVID testing would end and restrictions would be lifted in England, we look at the implications.

> eeking to draw a line of sorts under the COVID-19 pandemic, the government announced at the end of February its intention to end many of the restrictions that have become an integral part of life over the past two years. Known as the "Living with COVID" plan, it set out the timetable that would, for now at least, consign self-isolation, masks, social distancing and contract tracing to history.

from government restrictions to people exercising personal responsibility. "We don't need laws to compel people to be considerate to others. We can rely on that sense of responsibility towards one another," he told the Commons.

Many health experts were taken aback by the sudden and wholesale abandonment of the measures that have played such a vital role in keeping the spread of the virus under relative control. Where was the evidence, they wondered, that COVID has become less of a substantial threat to public health?

Perhaps even more controversial was the decision, after some wrangling among ministers, that from 1 April 2022 the government would "no longer provide free universal symptomatic and asymptomatic testing for the general public in England". Lateral flow tests (LFTs), which had become something of an emblematic object during the most recent Omicron phase, and the more-involved polymerase chain reaction (PCR) test would no longer be available on demand and at no cost, except to "a small number of at-risk groups" and social care workers. As of early March, the health authorities in Scotland, Wales and Northern Ireland had announced no plans to end free testing.

False public confidence?

The response from businesses in England has been cautiously optimistic, welcoming the lifting of the restrictions while at the same time acknowledging that routine mass testing has been a key resource in the fight against the spread of the virus.

The British Chambers of Commerce Co-Executive Director Claire Walker said that the Living with COVID plan "inches us closer to pre-pandemic trading conditions. However... members continue to tell us that access to free testing is key to managing workplace sickness and maintaining consumer confidence." The Chief Policy Director of the CBI Matthew Fell said that while it was a significant step forwards for firms, a balance had to be struck between confidence building and cost-cutting: "Mass lateral flow testing has kept our economy open and firms continue to believe the

Medical bodies were more outspoken. The IBMS warned

the costs."

economic benefits far outweigh

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of "false public confidence" and an "upswing in the infection rate". It added that while the vaccination programme had introduced a good level of immunity, that could change with a subsequent mutation. "The capability to resume testing at scale, and the associated workforce support, must be part of the contingency plan," it said.

The BMA's Council Chair Dr Chaand Nagpaul said the plan failed to protect the public from COVID: "On the one hand the government says it will keep monitoring the spread of the virus, and asks individuals to take greater responsibility for their own decisions, but by removing free testing for the vast majority of the population on the other, ministers are taking away the central tool to allow both of these to happen." RCN General Secretary and Chief Executive Pat Cullen was concerned that NHS staff would be excluded from free testing: "This move feels unplanned and ill-informed.

Nursing staff... know the reality of living with COVID-19 and will want to see the evidence for this decision. They need to be assured there are robust plans in place should the number of cases increase again, or a new variant emerges." She added that the government is leaving the way open to increased infection rates and yet more pressure on an already overworked and understaffed NHS.

The right time?

These comments encapsulate the main arguments for and against the measures set out in Living with COVID, as well as the general misgivings surrounding the planned discontinuation of free LFT and PCR testing for all. Off-setting that disquiet is the plain reality that testing on such a scale can't last forever - the cost is claimed to be in the region of £2bn a month, though the costly PCR would account for the greater part of this; LFTs are thought to cost £2 to £4 each. But is now the right time to put aside this particular defence against the virus that has wrought such havoc for the past two years?

Voices in the biomedical science community have also been mulling over the reasons for the decision to end free testing and the possible implications.

"There does have to come a time when we stop testing," says Dr Christopher Ring, Senior Lecturer in Microbiology at Middlesex University. "I'm glad I don't have to make that decision, but I can't help thinking it's a bit premature."

At the University of Brighton's School of Applied Sciences, Principal Lecturer Dr Sarah Pitt also feels the move

> has come too early: "Looking at the number of new cases and

the people dying at the time of the announcement, they were still high for a preventable infectious disease. One thing we know about this virus is that a large proportion of people, possibly one in three,

even if they've had the vaccine, don't have any symptoms or have very non-specific symptoms. That means the only way to know they've got COVID is by doing a test."

Sally Cutler, Professor in Medical Microbiology at the University of East London, agrees that while we do need to re-establish some kind of normality, the timing is off: "I feel it was premature, not properly thought out. Financially, we can't continue forever with this sort of pandemic response but I don't think there's a proper plan in place yet for how we're going to move forward or protect vulnerable groups."

A key concern for Christopher Ring is the removal of the requirement to isolate after a positive test. "Effectively allowing people to ignore a positive test suggests it's okay to carry on as normal, knowing you are infected with the virus, disregarding the vulnerable members of society. Many vulnerable people are still out there. They are more susceptible to infection and less likely to respond to vaccines."

Sally Cutler suggests heightened immunity could keep case numbers down. "The infection levels we've seen during Omicron have been huge, whether people are vaccinated and had boosters or not. This boost of immunity means that until a new variant comes through, the population is going to be pretty well protected. Though infectious people are going to be down the pub, in the cinema, on the tube trains and everywhere else, the likelihood of meeting somebody who hasn't been infected yet is much slimmer."

Sarah Pitt says she has not been a big fan of the lateral flow tests: "We haven't used them in the way manufacturers intended. They're meant to be a quick triage for people who have symptoms, not for screening asymptomatic people. The big drawback is that while you can trust a positive result, you can't really trust a negative result. Nevertheless, these tests have been a useful way for people to find

TESTING BACKGROUND

The LFT test emerged from Operation Moonshot, the UK's £100bn programme to develop reliable technology to detect the COVID-19 virus. PHE, University of Oxford and University of Manchester carried out a key study to establish the efficacy of the test in September 2020. Just three months later, the MHRA approved the test.

The PCR test was based on established technology for detecting and copying DNA samples. After the Chinese authorities isolated the genetic sequence of the virus in January 2020, PHE began testing a prototype PCR test.

The cumulative total number of COVID tests in the UK reported up to 7 March this year was 479,555,492.

out sooner rather later that they have COVID, allowing them to isolate and stop the further spread of the infection."

Surveillance is key

On an individual level, the end of free testing will pose a problem for people visiting vulnerable relatives and friends. Of course they can pay for a test, but that introduces all sorts of further decisions, not least for those already struggling to pay bills.

It also raises the question that if we're effectively ignoring test results by removing the need to isolate what is the point of testing at all? "We still need to know where this virus is going," says Christopher Ring. "The lateral flow test has a number of advantages in terms of ease of use, speed and cost, but it doesn't give us the opportunity to sequence the virus. We also need the PCR test to give us information about the evolution of the virus, the emergence of new variants and the associated risks."

The issue of surveillance is key. "This has to be ongoing," says Sally Cutler. "Not



During the announcement of the Living with COVID plan, mention was made of monitoring the developing COVID situation via cohort studies. "These have a value," says Cutler, "but it's only a small subset of people who will be tested at regular intervals. Whether they are suitable and sufficient to give early warning is debatable. It's also very expensive to test a cohort."

Emerging variants

Perhaps a better way to maintain a background watch on infection levels and emerging variants, while assuming it's not necessary to know exactly who in a community is positive and who isn't, is via wastewater testing, suggests Cutler. "I hope there will be significant support for wastewater testing. In contrast, it is fairly cost-effective and allows the sampling of whole communities. While it doesn't give you actual numbers, it will give a semi-quantitative interpretation. It will also let us pull out the emergence of new variants with better precision and sensitivity. Cohort surveillance has its value, but it shouldn't be the only form of surveillance."

Should a new variant emerge – perhaps more a matter of "when" rather than "if"



21 April 2020 tests reported:

22,763

(the first day of daily data)

21 March 2021 tests reported:

1,893,830

(pre-Omicron peak)

4 Jan 2021 tests reported:

2,050,101

(Omicion pount)

7 March 2022 tests reported:

713,449



- how easy might it be to ramp up the testing capacity all over again? "I'm sure the resources are there and that it's doable," says Christopher Ring. "I think it's worth remembering that testing here in the UK has been more freely and widely available than in other countries. Some have had real problems with it. But I wonder how far people will be willing to comply with any new restrictions that might be imposed."

Any new variant would also pose the threat of rendering the existing tests obsolete. "The lateral flow tests have so far been able to detect all the SARS-CoV-2 variants," says Sarah Pitt. "The part of the virus they test for seems to be stable. But there's no guarantee that will remain the case. At points the PCR tests were getting odd results and missing some genuine positives; the virus had changed so much it was out-running the test. There's a possibility that might happen again and we'd have to review the tests at the same time as ramping up the service. It would be quite a logistical feat."

Evading immunity

Speaking of logistics, might the end of free testing release lab capacity? "A lot of testing has been done outside the

"The virus had changed so much it was outrunning the test. That might happen again"

normal clinical diagnostic labs," says Christopher Ring, "so there may not be much of an impact." Sarah Pitt agrees: "Community testing has been done in the Lighthouse laboratories that were set up separately and specially to test for COVID, plus a large proportion of the testing has been the at-home lateral flow tests."

Whatever the immediate implications of the end to free testing, one thing is certain – COVID is not going away.

"This virus is fighting for its survival too," says Sally Cutler. "It will mutate



further so that it can infect us all over again. It will keep coming back. I hope there will be measures to improve the vaccine. It has to evolve – we can't stick with boosting people again and again. I'd also like to see a clear plan of how we are going to test people who are looking after our vulnerable population."

Christopher Ring says it will be difficult to predict how the virus will behave.
"A new variant may already be out there. It may be able to evade immunity even more than the Omicron variant. There's an opinion going around that viruses tend to get less virulent. That's a nice idea, but there's not much evidence for it. Maybe I'm being overcautious, but I don't think we can afford not to be cautious."

Sarah Pitt also says there is no guarantee that a new variant will be milder or less infectious. "Nothing in the biology says that is going to happen, that it's going to be no worse than a common cold. A new variant might be worse. I don't think we needed to set an arbitrary date to stop testing and expect the virus to work to our timetable."