



## EDITORIALS

# Covid-19: why is the UK government ignoring WHO's advice?

Testing and tracing must resume urgently

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On 24 February, there were nine confirmed cases of covid-19 in the UK. On the same day, the World Health Organization recommended countries outside China with imported cases or outbreaks “prioritize active, exhaustive case finding and immediate testing and isolation, painstaking contact tracing and rigorous quarantine of close contacts.”<sup>1</sup>

On 22 March—when there were 5683 confirmed UK cases—Michael Ryan, executive director of the WHO health emergencies programme, repeated the message on the BBC: “What we really need to focus on is finding those who are sick, those who have the virus, and isolate them, find their contacts and isolate them.”

This is entirely unexceptional. Case finding, contact tracing and testing, and strict quarantine are the classic tools in public health to control infectious diseases. WHO says they have been painstakingly adopted in China, with a high percentage of identified close contacts completing medical observation. In Singapore, Vietnam, and South Korea meticulous contact tracing combined with clinical observation plus testing were vital in containing the disease. This combined with strong measures to enforce isolation for travellers returning from high incidence areas obviated the need for a national lockdown and closure of all schools in Taiwan and Singapore.<sup>2,3</sup>

The mathematical model used by the UK government clearly shows that rigorous contact tracing and case finding is effective:<sup>4</sup> the prediction of 250 000 deaths was predicated on what would happen without contact tracing.<sup>5</sup>

Contact tracing started in the UK but stopped early in the epidemic.<sup>6</sup> How effective it was is questionable, especially in England and Wales, which made covid-19 a notifiable disease only on 5 March,<sup>7,8</sup> two weeks after Scotland<sup>9</sup> and a week after Northern Ireland.<sup>10</sup> This, coupled with the lack of surveillance and testing of those contacting primary care, suggests the number of confirmed cases is an underestimate.

The reasons why tracing was stopped, against WHO recommendations, have not been published. It seems to be connected to a shift from “contain” to “delay” in the government’s action plan,<sup>11</sup> when contact tracing was replaced rather than supplemented with other control measures.

One reason seems to be a lack of tests and testing facilities. However, testing is a support not a substitute for tracing or medical observation, which is crucial. Current tests for the virus require careful validation and have low sensitivity, resulting in many false negative results, especially in the pre-symptomatic phase when viral load is low. As many as 40-50% of patients tested negative initially in China, and so the definition of confirmed cases was changed to include those with clinical symptoms.<sup>12,13</sup>

### Need for local response

Another factor is the decision to treat the situation as a single national epidemic rather than scores of local outbreaks each at different stages, needing to be tackled locally. National figures conceal huge variation in confirmed cases, ranging from over 400 in Birmingham and Hampshire to fewer than 20 in Blackpool, Hartlepool, Darlington, and Rutland. In Scotland the first case was identified on 1 March, and Orkney and the Western Isles still have no cases.

In the much less severe H1N1 flu pandemic in 2009, this same approach “seriously impaired the ability of local agencies to respond in a flexible, timely and pragmatic way to the rapidly emerging situation.”<sup>14</sup>

Matters have worsened since 2009. Central control in England was entrenched by the 2012 Health and Social Care Act, which created Public Health England (PHE) to protect the health of the public in England and gave local authorities the duty to improve the health of their local populations. PHE is legally in charge of communicable disease control and sits outside the NHS and local government in its regional hubs and field

epidemiological services. Directors of public health in local authorities have little scope for proactively taking local control.

These changes are exacerbated by the decimation of public health and laboratory facilities for testing. The decrease in numbers of consultants in communicable disease control and community control teams,<sup>15</sup> together with swingeing local authority cuts since 2010, have reduced the chances of a strong local response. Local pathology and virology services have been centralised and partly privatised, leading to a fragmented mix of for-profit and public laboratories and serious staff shortages.<sup>16-19</sup>

## Listen to disease control evidence

The scientific evidence has been dominated by behavioural science and mathematical modelling, with communicable disease control and public health sidelined. This leads to a lack of scientific challenge, as in the 2009 flu epidemic.<sup>20</sup>

So what now? WHO's mantra of "trace, test, and treat" must be followed. It is not too late to adopt WHO Guidance.<sup>21,22</sup> A second and third wave of the epidemic is likely. Contact tracing must recommence. This means immediately instituting a massive, centrally coordinated, locally based programme of case finding, tracing, clinical observation, and testing. It requires large teams of people, including volunteers, using tried and tested methods updated with social media and mobile phones and adapting the manuals and guidance published by China.<sup>23,24</sup>

The structure and capacity of our depleted healthcare system is now largely driving the response to this epidemic. It will continue to do so until services that support local communicable disease control are rebuilt and reintegrated.

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