It's goodbye PHE, and hello National Institute for Health Protection

Public Health England is to be replaced by a new organisation, the National Institute for Health Protection; this came as a shock to those working in public health, and to observers with many years' experience of the service. Here, Valerie Bevan provides an individual assessment and offers views on this latest iterative move.

Dr Valerie Bevan is chair of the British Society for Microbial Technology (BSMT), whose Annual Scientific Conference has been postponed until May 2021. The article below is written in a personal capacity and not on behalf of the BSMT. The views expressed are hers alone and are in no way critical of the hundreds of laboratory staff who are working extremely hard to deliver a good service to the NHS and communities. Dr Bevan previous wrote an article entitled *Microbiology testing networks: are they of value and fit for purpose?* published in the June issue of this magazine.[1]

So, the government is creating a new agency, the National Institute for Health Protection (NIHP) incorporating some of the responsibilities of Public Health England (PHE) with NHS Test and Trace, and the Joint Biosecurity Centre (see Table 1). Although the formal start will be April 2021, the new Institute took immediate responsibility for responding to the current pandemic. Initial indications six weeks after the new management has taken over suggest that it is faring no better than PHE, as testing has again become a burgeoning issue.

Colindale, north London – previously the Central Public Health Laboratory, HPA, PHE and now National Institute for Health Protection.

Personal impact

In this short assessment of what this government action might mean in terms of microbiology laboratories, I will start with the personal. The announcement that PHE was to be axed was made in the media on Sunday, 16 August 2020 and on that day Duncan Selbie, Chief Executive of PHE, apologised in a message to the 5500 PHE staff that they had to hear about its demise in the press. The decision to create a new organisation and to break up PHE was confirmed in an announcement by Matt Hancock on Tuesday, 18 August 2020.

Some ex-colleagues of mine in PHE reference laboratories are quietly confident that they will be transferred into the new NIHP and are about to be employed in their fourth organisation in 18 years. Others in PHE regional laboratories do not know who their employer is going to be – they hope to be transferred to NIHP but they may transfer to the NHS or it might be the private sector, or, they fear, perhaps redundancy. These PHE staff moved from health service terms of employment (having spent years undergoing regrading under Agenda for Change) to Civil Service terms in 2013 – thus, some of the 5500 staff who move to the NHS will presumably have their terms of employment changed again. On the personal level, what a nightmare for all staff but especially those concerned that they are not going to be part of the new organisation.

Public Health England

To take a brief look at PHE history, it was created as an executive arm of the Department of Health and Social Care

in April 2013 following the Health and Social Care Act 2012 and an extensive reorganisation of the NHS in England. It therefore lacked the independence of its predecessors, the Public Health Laboratory Service (PHLS) and Health Protection Agency (HPA). Until August 2020, PHE was the body formally charged with responsibility for preparing for, and responding to, public health emergencies such as COVID-19. Public Health England was given a very wide remit and incorporated 90 separate bodies. A new PHE National Infection Service (NIS) was created in 2015 covering the reference laboratories in Colindale as well as six laboratories in London and the regions. A new Strategy for Infectious Diseases was developed but apparently no implementation plan – certainly not one that was used in the current pandemic.

Table 1. A selection of National Institute for Health Protection (NIHP) responsibilities.

- NIHP local health protection teams to deal with infections and other threats
- Support and resources for local authorities to manage local outbreaks
- The Covid-19 Testing Programme
- Contact tracing
- The Joint Biosecurity Centre
- Emergency response and preparedness to deal with the most severe incidents at national and local level
- Research and reference laboratories and associated services
- Specialist epidemiology and surveillance of all infectious diseases
- The Centre for Radiation, Chemical and Environmental Hazards
- Global health security
- Providing specialist scientific advice on immunisation and countermeasures.

Source: Department of Health and Social Care.

What a time to do it!

To move to the bigger questions. Why has the government decided to axe PHE in the middle of a pandemic? Why has the government acted before there has been a proper review of the actions taken over the past few months? Why make this change before the House of Lords' review is completed? And, as an executive body of government, why was PHE allowed to fail?

It seems that PHE has been axed as a scapegoat for the many issues where PHE and government failed to act at the right time in this monumental COVID-19 crisis where, as a consequence, people have died who should not have died. Where did the responsibilities of PHE end and those of the government take over? There are many issues leading to the COVID-19 chaos, including not following the World Health Organization (WHO) advice in February to undertake a comprehensive testing programme followed by contact tracing and isolation; not testing in care homes and the community; confusion and over-estimation of numbers of tests carried out; not knowing the actual capacity in PHE and NHS laboratories, and so setting up Lighthouse laboratories to compensate (are the Lighthouse laboratories fully UKAS accredited?); in fact, having no implementation plan to deal with a pandemic despite previous recent reports warning the government that the UK was ill-prepared to deal with a pandemic – I could go on. In summary, however, this lack of preparedness and being reactive rather than proactive has led to PHE's downfall. Since the announcement of the demise of PHE, even under the new management arrangements, insufficient testing has become a resurgent problem. A massive demand for testing should have been foreseen and again the government has failed in its planning and implementation, and now it can't blame PHE.

The downward spiral

Both government and PHE have careered and swerved in response to the demands of the pandemic. Duncan Selbie, PHE's Chief Executive until he 'resigned' on 16 August, wrote in *The Sunday Telegraph* in June that PHE was not responsible for 'large-scale' testing, but surely PHE should have made sure that the testing was well organised through PHE and NHS laboratories. Why did we not have a network of laboratories accessible and ready to ramp up their testing programmes to cope with the unexpected? It seems to me that neither government nor PHE actually knew what the capacity for testing actually was and panicked by asking the private sector and others to set up the Lighthouse laboratories outside both PHE and the NHS.

Incorporating 90 separate organisations was, in itself, a massive task for PHE and perhaps having responsibilities for pandemics as well as wider public health issues such as obesity overloaded the organisation. It is as yet unclear where the responsibilities for such public health issues will lie after April 2021, but obesity was heralded recently by the Prime Minister as a vitally important issue and launched as a government strategy in July – who will be responsible for implementing it?

Governance – the outsiders

In addition, there are departments now part of PHE's NIS but not directly either reference or research, which I believe should be transferred with the reference and research laboratories to NIHP. Three nationally important services come to mind: the development of UK Standards for Microbiology Investigations (SMIs), the External Quality Assessment for microbiology, and the National Collection of Type Cultures (NCTC). Perhaps they fit in with the 'associated services', but it is far from clear and there is no natural home apart from NIHP.

I am especially concerned about SMIs, having led the development of the bacteriology methods for 18 years from 1994, and value the importance of standardisation of methods across diagnostic services including for SARS-CoV-2. Many microbiologists were worried about the variation in testing for the virus and the associated quality control, which were not handled well in the early stages of testing during this pandemic. The guidance notes issued with SMIs are vital in advising on such aspects of microbiology such as quality assurance and validation of tests.

A unit in the Health Protection Agency (HPA) undertook evaluations of kits and equipment, but this was closed in 2009 as it was not a 'core function' of the HPA. Since then an Assay Development Review Group was created within PHE but surprisingly was disbanded around the time that NIS was created. Perhaps regretting the loss of these key functions, NIS has more recently established the Diagnostics Development Evaluations Unit (DDEU), which oversees the validation of in-house assay development – a much needed service, especially in the current pandemic crisis where evaluations and validations of coronavirus testing systems have needed to be built up from scratch. One hopes that the resulting information is shared widely across the NHS.

The NIS incorporates some diagnostic services in its regional laboratories but there needs to be closer links with NHS laboratories. Will NIHP be interested in diagnostic microbiology? The early indications are that it will not, but it has always been my view that reference

services should be closely linked to diagnostic services – credibility for reference work can only be earned by understanding the basics.

Two-tier system?

Now to speculate on government plans for microbiology testing to be carried out in a future pandemic. Depressingly, more Lighthouse laboratories are being created in response to the current resurgence of the virus , which worryingly could lead to a complete separation of emergency testing from the NHS. This seems to me to be privatisation by the back door. Furthermore, the government issued a 'Prior Information Notice' in June (via PHE) for 'a multi-lot national microbiology framework agreement for diagnostics, research and development, manufacturing of supplies and services and provision of laboratory testing capacity' to the value of £5 billion.[2] This really disheartens me. In my opinion, the money proposed for laboratory services should be used to finance NHS laboratories not the private sector, which may well turn out to be more expensive and less reliable in the long term. Certainly, some laboratories that were privatised 10+ years ago are now being taken back into the NHS because of hidden costs.

Heading the new organisation

Another big concern is that the new NIHP is to be headed by two people who have no professional medical or science background in microbiology or public health.

The interim chair of the new agency, Baroness Dido Harding, a Life Peer appointed by David Cameron, is a business woman whose experience in setting up and implementing Track and Trace in May 2020 has been much criticised, including for failing to implement the contact tracing app. A previous role of the Baroness at TalkTalk also did not go well when the accounts of four million of its customers suffered a cyber-attack and their accounts were accessed. That in itself was bad enough but she confessed not to know whether customer data were encrypted. Perhaps she should be praised for her honesty but the criticisms of her at the time suggested ineptitude. In addition, she seems to have been appointed to the post of chair of NIHP behind closed doors, with no formal appointment procedure – perhaps that is acceptable for an interim appointment so long as the selection of the permanent chair is more rigorous.

Similarly, the interim chief executive of the new agency, Michael Brodie, does not have medical or science credentials. He has a business and finance background appointed in 2019 as chief executive officer of the NHS Business Services Authority and before that for several years was commercial director at PHE. Unlike the new chair, his name has not been linked with failures. His interim appointment was also behind closed doors.

Conclusions

I have previously argued that we should have a fully funded system where the NHS laboratories, public health laboratories and other public health services are fully integrated, with the capability for increasing capacity when demand necessitates it. However, it seems to me that we are heading for a two-tier system where the public sector deals with the routine diagnostic testing within the NHS, and the extraordinary is dealt with by the private sector. Worryingly, the Prior Information Notice could mean that there is an intention to outsource all microbiology services. I hope I'm proved wrong.

References

1 Bevan V. Microbiology testing networks: are they of value and fit for purpose? *Pathology in Practice* 2020 June; **21** (3): 18–21.
2 Ted – Tenders electronic daily (https://ted.europa.eu/udl?uri=TED:NOTICE:263375-2020:TEXT:EN:HTML).