The future of public health

One of America's most renowned Surgeons General, Everett Koop, once said:

Health care is vital to all of us, some of the time, but public health is vital to all of us all of the time.

If the last 6 months have taught us anything, surely they have taught us that no-one is untouched.

Public health is not narrow: public health comes from everything.

The air we breathe, the food we eat, how we protect ourselves and our communities from threats from afar.

The coronavirus pandemic has shone a light on our public health system, just as it has on so much of modern life.

And we have learned a lot — about this virus — about what has worked and what needs to change.

And about what we need, in order to be in the best possible position to fight COVID-19, to fight all infectious diseases, and prevent ill health now and long into the future.

Our nation's public health experts have delivered incredible work during this pandemic.

Just as they did in the response to Ebola, novichok and countless small outbreaks of diseases like norovirus and meningitis that no one ever hears about because our public health teams quietly and efficiently do their job day in, day out.

Over the past few months, we have seen some extraordinarily talented people working so hard to tackle coronavirus.

Our public health scientists were one of the first to sequence the genome of COVID-19 at Porton Down and Colindale, who created a diagnostic test for coronavirus at blistering speed, and who, working alongside local directors of Public Health, have given us the boots on the ground to investigate and quash outbreaks at a local level.

And the research, especially from Public Health England, has been some of the best that's been done into this novel disease, about which we of course knew nothing, just a few short months ago.

And I want to say this very directly to all of my colleagues in public health, colleagues at Public Health England, local directors of public health and their teams, contact tracers, diagnostics experts, epidemiologists,

infection control teams, and every single person who has contributed to this national effort.

You have been working round the clock since January.

You have done exceptional work and I am so proud of the part you have played in tackling this pandemic.

And with winter ahead, the life-saving work you are doing is more important than ever.

The changes that I am announcing today are designed entirely to strengthen our response.

To ensure that the system works, to help you do your vital work.

We are making the change now because we must do everything we can to fulfil our responsibilities to the public. To strengthen public health in the UK.

I take my responsibilities incredibly seriously to get this right. As Secretary of State, it is me who is accountable to Parliament for how the system operates.

And I want to make sure that we have the best possible system, having learned everything we've learned during this crisis so far.

The world has not seen a pandemic on this scale in modern times.

And while we have some of the best public health science in the world, including of course, the world's leading vaccine candidate and the world's only scientifically proven treatment for COVID-19, we did not go into this crisis with the capacity for a response to a once-in-a-century scale event.

For example, even though we have some of the best labs in the world, we couldn't call upon the large private sector diagnostics industry that some other countries were able to.

As a result, we've had to respond at an unprecedented rate.

To build our testing capacity at scale, to build a contact tracing system of a size never envisioned before and to boost our analytical capability, through the Joint Biosecurity Centre.

Alongside of course building the NHS capacity we needed, including through the Nightingale hospitals, again at a pace never seen before here, to make sure the NHS was never overwhelmed.

And so, to give ourselves the best chance of beating this virus — and of spotting and tackling other external health threats, now and in the future, we need to bring together the science and scale into one coherent whole.

So today I am announcing that we are forming a new organisation: the National Institute for Health Protection.

The National Institute for Health Protection will have a single and relentless mission: protecting people from external threats to this country's health.

External threats like biological weapons, pandemics, and of course infectious diseases of all kinds.

It will combine our world-class talent and science infrastructure with the growing response capability of NHS Test and Trace and the sophisticated analytical capability we are building in the Joint Biosecurity Centre.

Of course, these institutions work incredibly closely together already today.

But I want that integration to be seamless.

Crucially, it will be a national Institute that works very much locally, working with local directors of public health and their teams, who are the unsung heroes of health protection.

Their local insight and intelligence is a mission-critical part of our response.

The National Institute for Health Protection will also work closely with the devolved administrations, taking on existing UK-wide responsibilities, and supporting all 4 Chief Medical Officers with access to the best scientific and analytical advice.

By bringing these parts of the system together, we can get more than the sum of the parts.

And the mission is for a purpose. So we have a stronger, more joined-up response to protect people and the communities in which they live.

The NIHP will report directly to ministers, and support the clinical leadership of the Chief Medical Officers.

It will be dedicated — dedicated — to the investigation and prevention of infectious diseases and external health threats.

That will be its mission. It is conceived amid crisis but it will help maintain vigilance in the years to come.

Prevention

PHE of course have other incredibly important responsibilities — centred around health improvement — and these are absolutely vital too.

As the Prime Minister made abundantly clear with the launch of our Obesity Strategy last month, we are passionately committed to health improvement — the prevention agenda.

And of course the 2 are linked, protection and prevention: we've seen how conditions like obesity can increase the risk for those who have coronavirus.

Levelling up health inequalities and preventing ill health is a vital and a broad agenda.

It must be embedded right across government, across the NHS, in primary care, pharmacies, and in the work of every local authority.

So we will use this moment to consult widely on how we embed health improvement more deeply across the board, and I'll be saying more on this over the coming weeks.

This will in turn allow the National Institute for Health Protection to focus, focus on the science and the scale needed for pandemic response, that mission.

We have been looking at best practice from all over the world. We want to build an institution that constantly strives to be the very best.

Role of the NIHP

Today, as I launch the new National Institute for Health Protection, I want to say 3 things that I believe are critical for this new institution to succeed.

About response, resilience, and about culture too.

Response

First, the immediate task of the NIHP is to pull together in one place the operational capabilities for the COVID response.

While we hold out bright hope for the success of brilliant scientists who are working day and night on a vaccine, no vaccine is guaranteed to succeed.

So, each day we must strengthen our response:

Drive up testing capacity, bring on new technologies, contact trace thousands to protect them and their communities, and analyse and understand this virus more and more and more.

So we have no time to lose.

To my brilliant colleagues at PHE, I want to thank you, each and every one of you, for the service you have provided and will continue to provide.

In particular I want to thank Duncan Selbie, who has led PHE with distinction for the last 7 years, and his senior management team.

I am delighted that Duncan will support PHE and the NIHP throughout this transition and continue his sterling work on behalf of the UK overseas.

And I want to welcome Michael Brodie, who has a wealth of experience and a brilliant track record of delivery, who will step up as interim Chief Executive during the transition.

From today, PHE, the JBC and NHS Test and Trace will operate under single leadership, reporting to Baroness Dido Harding, who will establish the NIHP, and undertake the global search for its future leadership.

And I have no doubt that under Baroness Harding, we will found the NIHP as a thriving mission-driven organisation.

We have a common mission. The greatest mission of any of our working lives.

And we have no time to lose in building the institution of the future.

Resilience and preparedness

Next, while of course we must focus on immediate response, so too must we improve resilience and preparedness, not just for coronavirus but for the next threat that lies around the corner.

We are living in an increasingly inter-connected world.

The UN projects that by 2050, over two-thirds of the global population will live in increasingly large, dense urban centres.

External threats to public health can emerge and spread quickly, and can reach our shores within days.

My single biggest fear is a novel flu, or another major health alert, hitting us right now, in the middle of this battle against the coronavirus pandemic.

Even once this crisis has passed — and it will pass — we need a disease control infrastructure that gives us the permanent standing capacity to respond as a nation, and the ability to scale up at pace.

One of the lessons, I believe, from the crisis is that we need an institution whose only job is to look out with constant vigilance to prepare for and respond to external health threats like pandemics.

So as well as bringing together our core pandemic response capabilities into one place, the NIHP will bring focus.

It's worth dwelling on this point for a moment.

The question of how to protect a country from risks that are infrequent, yet devastating, is not restricted to infection control.

Think of how we work to prevent terrorism, and protect financial stability, for instance.

Just as with pandemic preparedness, there can be years between major threats materialising, especially when things go well.

The public policy challenge is how to build a system that is resilient and stays alert for years on end — learning, preparing, ready.

We can learn from abroad, from countries like South Korea, and from Germany's

Robert Koch Institute, where their health protection agencies had a huge primary focus on pandemic response.

We will build the same focus here.

So we will ensure the NIHP has the strongest possible function for intelligence, data analytics and surveillance, and a standing capacity to act fast at scale.

So we can remain equal to any future threats.

Culture

The third thing I want to say is something about working culture.

The National Institute for Health Protection will succeed by building an institution with the most revered expertise, in a culture that is open, outward-looking, non-hierarchical, and embraces the potential of its whole team.

Getting this culture of rigour and speed, of expertise and inquisitiveness, of outward-looking confidence, is critical to success.

Over centuries our country has contributed so much to global public health, and the life chances it brings.

We're the home of Edward Jenner, who arguably saved more lives than anyone else in human history, with his pioneering vaccine for smallpox.

And John Snow, who just a few miles from here, used data in effectively one of the world's first contact tracing exercises, using epidemiological methods to help the world understand how infectious diseases like cholera really spread.

In fact John Snow's insight, that published highly specific local data, helps people tackle a contagious disease, is as vital today as it was in 1854.

We have incredible expertise in this country.

We need to support that expertise to flourish, in a way that meets the fast-moving demands of public health in the 21st century.

The creation of any new organisation provides a real opportunity to build and cement its culture.

This new Institute will focus on what works, bringing in ideas and expertise from wherever it can be found.

And it will support a culture of collaboration and change, shunning silos and unnecessary bureaucracy.

It will work seamlessly to harness the capabilities of academia and groundbreaking and innovative private companies with whom we must work so

closely to get the best result.

It will work hand in glove with the NHS, and it will use the most modern, cutting-edge digital and data analytics tools at its core.

These are the qualities that will allow us to deal not just with today's threats, but tomorrow's threats too.

Conclusion

The first responsibility of any government is the protection of its citizens.

And threats to public health are among the most important of all.

Because it is only if people feel safe and secure in the environment that they live in that they have the confidence to start a business, play an active part in their community, and enjoy all the incredible experiences that life has to offer.

Threats like this coronavirus pandemic can emerge anywhere, and at any time.

So we must be ready. Ready to beat this virus, and protect all of us, all of the time, over the years to come.

Britain eats out to help out - over 35 million meals claimed in first two weeks

- the scheme, part of the Chancellor's Plan for Jobs, aims to protect jobs in the hospitality sector which has been hit hard by coronavirus
- over 48,000 claims have been made by some of the 85,000 restaurants taking part in the scheme

Over 35 million meals have been enjoyed by diners across the country in the first two weeks of the government's landmark Eat Out to Help Out discount scheme.

Data released today also shows that over 85,000 restaurants have now registered for the scheme, including high-street chains such as Wahaca, Joe and the Juice and Pho as well as thousands of small businesses across the UK — including Bundobust (Leeds, Liverpool, Manchester) and Veggie Republic (Liverpool).

Over 48,000 claims have been made by some of these 85,000 restaurants so far and the government is reminding outlets to submit their claims to receive the

generous government payback.

This comes days after data from OpenTable showed that restaurants have been on average 27% fuller than they were during the same period (Monday to Wednesday) in August 2019.

Chancellor of the Exchequer Rishi Sunak said:

Today's figures show that Britain is eating out to help out — with at least 35 million meals served up in the first two weeks alone, that is equivalent to over half of the UK taking part and supporting local jobs in the hospitality sector.

To build back better we must protect as many jobs as possible, that is why I am urging all registered businesses to make the most of this by claiming back today — it's free, simple and pays out within 5 working days.

The Eat Out to Help Out scheme aims to help protect the jobs of the hospitality industry's 1.8 million employees by encouraging people to safely return to their local restaurants, cafes and pubs where social-distancing rules allow. Around 80% of hospitality firms stopped trading in April, with 1.4 million workers furloughed, the highest of any sector.

Stephen Wall, Managing Director and co-founder, Pho, said:

The Eat Out to Help Out scheme has really been amazing. It's so nice to see our restaurants full of happy staff and customers again. It has certainly benefitted our early week figures and seems to have encouraged the British public to dine out safely, as our restaurants are filling up and staying busy throughout the weekend, too.

Many participating restaurants offer healthy and low-calorie options, and the scheme should be enjoyed as part of a healthy and balanced lifestyle. No vouchers are needed, with the participating establishment deducting 50% from the bill.

Anyone visiting a participating restaurant, café or pub on Mondays, Tuesdays and Wednesdays throughout August will receive the half price discount up to £10 per person — keeping more money in hardworking families' pockets and giving a vital boost to the UK's hospitality sector.

Marko Husak, Co-Founder, Bundobust:

The response to Eat Out to Help Out has been phenomenal. Even though venues are operating at reduced capacity and with smaller teams following more thorough safety measures, we're still managing to serve a similar number of customers on Mondays — Wednesdays that we were this time last year. That makes a huge difference to independents like us.

The scheme — part of the government's Plan for Jobs — applies to all food and non-alcoholic drinks, with a maximum discount per person of £10. It could save a family of four up to £40 per meal.

Businesses have become Covid-secure through, for example, protective screens, contactless payments, social distancing, one way walking systems, online bookings and reduced capacity.

The Eat Out to Help Out scheme is one part of the Chancellor's Plan for Jobs, announced last month. Other measures announced to protect, support and create jobs include cutting VAT for tourism and hospitality by 15%, a £2 billion Kickstart Scheme and an £8.8 billion investment in new infrastructure, decarbonisation and maintenance projects.

This support for the hospitality sector comes on top of the government's unprecedented assistance for all businesses including through grants, tax deferrals, scrapping business rates, the furlough and self employed support schemes and government-backed loans.

New figures out today show that:

- £35.47 billion worth of Bounce Back Loans have been approved, 1,174,854 in total
- £13.68 billion worth of Coronavirus Business Interruption Scheme loans have been approved, 60,409 in total
- £3.50 billion worth of Coronavirus Large Business Interruption Loan Scheme loans have been approved, 516 in total
- £588.3 million worth of convertible loans through the Future Fund approved for 590 companies

Notes

- 35 million is not the total number of meals benefitting from the discount, as some businesses may not have claimed back yet
- 85,147 businesses registered for the scheme so far
- Claim back on the scheme
- Latest statistics for Eat Out to Help Out
- Find a restaurant that's registered for the scheme
- Guidance: Get a discount with the Eat Out to Help Out Scheme
- More information on the Plan for Jobs here

Further Information

- The scheme is open 18,19,24,25,26 and 31 August 2020.
- There is no cut-off date for registration businesses can register for the scheme up until and including 31 August 2020.
- The Chancellor has visited a number of eateries that have benefitted from Eat Out to Help out images available on our <u>Flickr.</u>

- There is no minimum spend and the discount can be used at the same time as other offers and discounts. The maximum discount per person is £10.
 All diners in a group of any size will qualify for the automatic discount.
- 8% of the UK's workforce over 2.4 million people rely on hospitality, accommodation and attractions for employment. Of this, food and beverage services (pubs, restaurants, cafes etc) account for 1.8 million jobs.
- Evidence from 2008 suggests that the hospitality sector could be a key contributor to the jobs recovery post-Covid. It generated 22 per cent of new jobs for unemployed people in 2010 and 2011, according to the Resolution Foundation, despite accounting for just 10 per cent of overall employment. Getting Britain working Safely again, 2020.
- The sector employs more women than men, 56% and 44% respectively. ONS Labour Force Survey, June 2020, Graduates in the UK Labour market, 2017

Market exploration: robotic and autonomous systems (platooning)

Summary

The Defence and Security Accelerator (DASA) is scoping the potential for funding opportunities to develop the use of autonomy for logistic convoy operations.

On behalf of the United Kingdom (UK) Ministry of Defence (MOD), we want to better understand the current market capability of robotic and autonomous systems that potentially require further investment or experimentation by MOD. We are interested in both early technology and mature systems with the potential for integration onto military vehicles.

We are keen to explore the area further and better understand the operational limitations of different technological approaches.

This information will provide us with knowledge on the maturity of the solutions that currently exist, novel solutions in development and areas that potentially require further investment by MOD.

This request for information is not a commitment to subsequently launch a

Background

Robotic and Autonomous Systems (RAS) are expected to offer MOD increased efficiency and operational effectiveness. In the field of logistics, we are looking to operate with greater tempo, mobility and agility, but with reduced soldier burden by employing RAS technologies. In particular we are seeking to understand the capability provided by RAS such as Artificial Intelligence (AI) enhanced autonomous distribution systems and to understand current early technology and mature solutions in this space. This includes autonomy enabled logistics convoys where RAS allows 'intelligent trailers' or driverless trucks to be linked together, thereby reducing personnel and fuel requirements, and more mature technology that might allow fully autonomous logistic distribution.

We are keen to explore two key areas:

- Autonomous driving and navigation technologies: defence and security continues to evolve from the industrial to the information age. These systems would increase resilience and duration of the deployed force, reduce reliance on and thereby vulnerabilities associated with rearbased supply chains, reduce logistic demand by increasing velocity of material delivery, reduce stock holdings and allow soldiers in support roles to be threat facing rather than sustainment focused. We are keen to understand how this might be achieved.
- Leader-follower autonomy: While we are keen to understand the range of solutions, leader-follower self-driving vehicles, a capability commonly known as 'platooning', appears to be one of the more mature solutions that allows a significant increase in material lift output, whilst concurrently allowing workforce reapportionment (and reduced risk). This is essentially a modern-day interpretation of a World War I wagon-train where, a 'leader' vehicle driven by a person would 'guide' several self-driving autonomous 'follower' vehicles. These automotive-trains, which are essentially linked 'intelligent trailers, would become more autonomous as the technology matures. Note however that we are keen to understand other solutions that might provide the same or greater advantages.

Figure 1

Within these key areas, we are looking to understand current levels of autonomy, the complexity of tasks the system can undertake, and the capability to operate in contested environments:

Levels of autonomy, including:

- level of human interaction (such as leader-follower, fully autonomous, regular vs occasional human intervention)
- dependency on external information (such as network, Global Navigation

Satellite Systems (GNSS) and fore-knowledge/imagery of route)

- number of unmanned trucks in convoy, or ability to operate independently
- response time
- accuracy of tracking and spacing (flexibility)

Complexity of tasks, including:

- basic manoeuvres (forwards, stopping, cornering)
- complex manoeuvres (reversing, trailers, sharp turns, deploy, reform convoy)
- complex environment (dirt tracks/cross country/public highways/urban environments)
- detection and avoidance of obstacles (simple and complex obstacles, above ground and holes, static/moving traffic, urban terrain)
- operation in low light and adverse weather conditions

Capability to operate in contested environments, including:

- reduced band-width comms or no comms
- spoofed GNSS/no GNSS
- threat action (for example, traffic, detection and response to threat action)
- countermeasures resistance
- managed signature (active vs passive sensors)

What we want

The UK MOD would like to see a range of systems to fully explore this area.

Where the technology is a mature (or maturing) system, we are keen to understand its capability against the following requirements:

- system is of sufficient maturity to enable hands-on experimentation by Soldiers
- system is safe and suitable for use within supplier defined limits
- system can demonstrate at least 3 truck convoy with only lead truck driven (lead truck may also be autonomous)
- system can operate at tactically useful speed
- autonomy can be integrated onto military platforms (such as MAN SV and Land Rover, noting suppliers may offer other platforms), and the level of modification required for such integration
- system does not affect manual driving capability of vehicles

In addition, we are also interested in whether the system has the capability or has the potential to meet any of the following:

- system may be capable of being fitted as an applique capability
- users should be able to move and control the vehicle remotely from another location (such as other vehicles in the convoy, dismounted or operations room).

What we don't want

We are not interested in very low maturity solutions or solutions that could not be developed to meet the desired standard.

This is not a competition and therefore we are not asking for costed proposals at this stage. This is a market engagement request for information exercise and we do not commit to subsequently launch a formal DASA competition.

How to submit a Capability Submission Form

Responses to this market exploration must be submitted via the <u>DASA</u> submission service, for which you will be required to register.

There are 6 questions relating to your capability, where we are seeking to understand what and how much further development is required for a complete solution to all requirements, or whether a combination of separate solutions is required. The information you provide will assist in developing a statement of requirements for potential future activities. You will not be held to deliver to any of the timescales or cost estimates that you may give.

Submissions must be submitted by midday BST on Tuesday 29 September 2020.

Please only provide details of one product/capability per form. If you have a number of potential solutions, then please submit multiple forms. If you have any questions, then please email accelerator@dstl.gov.uk with 'Robotic and Autonomous Systems' in the subject line.

How we use your information

Information you provide to us in a Capability Submission, that is not already available to us from other sources, will be handled in-confidence. By submitting a Capability Submission Form you are giving us permission to keep and use the information for our internal purposes, and to provide the information onwards, in-confidence, within UK Government. The Defence and Security Accelerator will not use or disclose the information for any other purpose, without first requesting permission to do so.

<u>Civil news: expressions of interest</u> invited for HPCDS work



Expressions of interest are welcome to deliver Housing Possession Court Scheme (HPCDS) services in:

- Bodmin and Truro
- Southampton
- Telford

We are inviting expressions of interest from current HPCDS providers only.

Length of contracts

Contracts will be offered from the date organisations confirm they are able to begin work until 30 September 2021. This is subject to the LAA's right to extend for up to a further 12 months.

How to apply

You can apply to deliver this service by downloading and completing the relevant expression of interest document from our civil tenders' page on GOV.UK — see below.

Organisations interested in delivering this service must complete and return the relevant expression of interest document by the 9am deadline on Tuesday 25 August 2020.

Further information

<u>civil.contracts@justice.gov.uk</u> — to return the expression of interest document

Civil tenders — to find out more and download documents

Published 18 August 2020 Last updated 18 August 2020 <u>+ show all updates</u>

1. 18 August 2020

Added amend to time format and additional accessibility content for acronyms.

2. 18 August 2020

First published.

UK government announces Automated Lane Keeping System call for evidence

- call for evidence launches on using new technology for automated driving at low speeds
- technology could make driving safer, smoother and easier for motorists
- drivers could see systems on UK vehicles by Spring 2021

The UK is taking steps forward in automated technology in vehicles with the launch of a call for evidence today (18 August 2020) to help shape how innovative new systems could be used in future on GB roads.

The <u>call for evidence will look at the Automated Lane Keeping System (ALKS)</u> — an automated system that can take over control of the vehicle at low speeds, keeping it in lane on motorways.

Animation video

This technology is designed to enable drivers — for the first time ever — to delegate the task of driving to the vehicle. When activated, the system keeps the vehicle within its lane, controlling its movements for extended periods of time without the driver needing to do anything. The driver must be ready and able to resume driving control when prompted by the vehicle.

The government is seeking views from industry on the role of the driver and proposed rules on the use of this system to pave the way towards introducing it safely in Great Britain, within the current legal framework. The call for evidence will ask whether vehicles using this technology should be legally defined as an automated vehicle, which would mean the technology provider would be responsible for the safety of the vehicle when the system is engaged, rather than the driver.

The call for evidence also seeks views on government proposals to allow the safe use of this system on British roads at speeds of up to 70mph.

Transport Minister Rachel Maclean said:

Automated technology could make driving safer, smoother and easier

for motorists and the UK should be the first country to see these benefits, attracting manufacturers to develop and test new technologies.

The UK's work in this area is world leading and the results from this call for evidence could be a significant step forward for this exciting technology.

Following the approval of ALKS Regulation in June 2020 by the United Nations Economic Commission for Europe (UNECE) — of which the UK is a member — the technology is likely to be available in cars entering the UK market from Spring 2021.

The government is acting now to ensure that regulation is ready where necessary for its introduction.

Edmund King, AA president, said:

Over the last 50 years, leading edge in-car technology from seat belts to airbags and ABS has helped to save thousands of lives.

The government is right to be consulting on the latest collisionavoidance system which has the potential to make our roads even safer in the future.

Mike Hawes, SMMT Chief Executive, said:

Automated technologies for vehicles, of which automated lane keeping is the latest, will be life-changing, making our journeys safer and smoother than ever before and helping prevent some 47,000 serious accidents and save 3,900 lives over the next decade.

This advanced technology is ready for roll out in new models from as early as 2021, so today's announcement is a welcome step in preparing the UK for its use, so we can be among the first to grasp the benefits of this road safety revolution.

As automated technology in vehicles continues to improve, it must be used safely by drivers in the UK. By issuing a call for evidence we are giving those with information or concerns about ALKS technology an opportunity to help shape future policy.

In late 2020, we plan to launch a public consultation on the detail of any changes to legislation and The Highway Code that are proposed, which will include a summary of responses to this call for evidence.