



# The Association of Directors of Public Health

## Explainer: COVID-19 Vaccination

### Key messages

- The continuing development and deployment of vaccines at scale over the next few months adds a powerful tool to a broader combination strategy aimed at preventing and suppressing COVID-19 infections.
- Whilst the NHS is responsible and accountable for commissioning the vaccination programme, the scale of this roll out requires a truly national effort with the knowledge and expertise of key partners – including local government – understood, utilised and resourced.
- Directors of Public Health have a key role in quality assurance and safety; as well as reducing health inequalities. Many disadvantaged communities and groups have already been disproportionately affected by COVID-19 so there needs to be a particular focus on promoting and supporting uptake otherwise health inequalities could increase further.

### Introduction

A vaccine<sup>1</sup> is the most effective way to protect vulnerable people from COVID-19. The rapid progress that continues to be made in developing safe and effective COVID-19 vaccines is a testament to the skill, expertise and dedication of the scientific community and regulators; and a tribute to all those who have volunteered to participate in trials.

It is right that the NHS leads the vaccination roll out, however the contribution of local authorities needs to be clear and explicit.

It is essential that local authorities and Directors of Public Health (DsPH) are front and centre in national and local planning for the vaccine roll out. This reflects the community leadership role of local councils and the importance of local health protection, emergency planning and social care systems, as well as the pivotal role local councils have played throughout the course of the pandemic. All local areas have worked with, and strengthened, national programmes such as PPE (Personal Protective Equipment) and the Test and Trace Service, bringing local knowledge, strong relationships, and an ability to deliver on the ground at pace. Ensuring strong involvement from DsPH and local authorities – with sufficient resourcing and the necessary flexibilities – will help to maximise uptake amongst the priority and disadvantaged groups.

The purpose of this briefing is to set the context for the COVID-19 vaccination roll out, explore the key challenges and obstacles to large scale roll out as well as the critical role and contributions DsPH and local authorities can make.

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<sup>1</sup> Vaccination is the act of introducing a vaccine into the body to produce immunity to a specific disease. Immunisation is a process by which a person becomes protected against a disease through vaccination. This term is often used interchangeably with vaccination.

## Scientific context

The provision of vaccination is essential in achieving population immunity for viral infections. No infection in living memory has achieved population immunity without vaccination. Extensive experience of other vaccination programmes has provided us with important lessons which DsPH have been collating.



The scientific context of vaccination can be seen as having three essential components. From biology and biochemistry in the development phase, to the social psychology of vaccine uptake and acceptance in the deployment phase, vaccination brings well known scientific challenges. Public understanding and support for continuing prevention measures during early roll out will be crucial in suppressing infection to manageable levels and protecting health services from being overwhelmed. Even as vaccines are being deployed at scale, continuing with other infection prevention and control measures remains vital until a sufficient number of people have been vaccinated and the desired population impact of the vaccine has been achieved. Vaccination must be seen as part of a balanced combination strategy for preventing and suppressing infection. The Association of Directors of Public Health (ADPH) outlined this approach in the guidance [Protecting Our Communities: Pulling together to achieve sustainable suppression of SARS-CoV-2 and limit adverse impacts.](#)

## Policy and legal context

While the policy and legal context for vaccination is in place, an exercise of this scale was not envisaged.

Provision of vaccination is a part of the Secretary of State's duty to provide a comprehensive National Health Service (NHS) under the National Health Service Act 1966. While vaccine delivery can be delegated to any organisation, there is an existing NHS Public Health Functions Agreement (Section 7A) between the Secretary of State and the NHS Commissioning Board for England. Under this agreement, NHS England is responsible and accountable for the commissioning of national immunisations programmes.

The health protection system in England allocates a variety of roles to different parts of the system. For example, the [Joint Committee on Vaccination and Immunisation](#) (JCVI) advises the government on vaccine policy, including on what vaccines to commission and provide for the population. Vaccinations are subsequently commissioned by NHS England and delivered by a variety of providers such as GP surgeries and pharmacies.

Public Health England (PHE) and local DsPH also have key roles in quality assurance and safety. DsPH are expected to provide appropriate challenge to arrangements and advocate for an emphasis on reducing health inequalities and improving access for disadvantaged groups in the work of commissioners, providers and other key stakeholders.

Although these legal arrangements are still in place, governance in relation to vaccine safety and efficacy remains an issue which needs further clarification and explanation by government as well as the allocation of clear roles. Many of the existing governance arrangements are presented in [The Green Book](#).

More broadly, the policy context for the health protection system is set out in the joint PHE and ADPH publication [What Good Looks Like for High Quality Local Health Protection Systems](#). This guidance aims to support local systems to deliver the highest possible quality health protection functions, consider the principles that underpin excellence for all organisations involved in protecting the public's health and promote strengthened partnership working within local health systems.

## **Addressing the key challenges and obstacles to large scale vaccination**

Few high-income countries have rolled out mass community vaccination campaigns; and, with the exception of flu programmes, most current vaccines target younger people.

The logistical challenges will be vast and are compounded by factors such as existing workforce capacity, the need for two doses and disinformation being circulated by anti-vaccination campaigners.

This section explores the challenges and obstacles to large scale vaccination and how they should be addressed.

### **1. Health inequalities**

There is a risk that pre-existing health inequalities exposed and worsened by COVID-19 are further exacerbated by the vaccine roll out.

Supplies of the vaccines will initially be limited, with stocks increasing over time to meet need. Prioritisation is necessary but means unequal access and thus could have implications for health inequalities.

PHE has set out a [framework](#) which considers the impact and implications for health inequalities in the prioritisation of COVID-19 vaccines. In addition to considering health inequalities regarding prioritisation of the vaccine, actions to address health inequalities should also be employed during the implementation phase.

It is important to work proactively to reduce health inequalities by identifying and addressing barriers to access and uptake of vaccination in the operational design and implementation of the programme as well as ensuring that effective and transparent data systems are in place to monitor uptake and support the development of locally sensitive approaches. These issues are discussed in the following sections.

### **2. Low uptake and vaccine hesitancy**

In recent years, public acceptance and uptake of vaccinations has fallen, both in childhood and adult vaccination programmes with significant implications for public health.<sup>1</sup> Data suggests that many of the groups in society who have already been disproportionately affected by COVID-19 are those who are least likely to say they will be vaccinated.<sup>2</sup> The risk therefore is that the vaccine roll out further exacerbates these inequalities.

The reasons for vaccine hesitancy and resistance are multifactorial and complex, and include concerns around side effects and vaccine safety, as well as a lack of trust in vaccine efficacy. As this is a new virus, people may also be hesitant about being part of the first cohort vaccinated.

### **Key recommendations & considerations**

#### ***i. Targeted and locally led communications***

- National campaigns only work when accompanied by targeted local community engagement and visible leadership. There needs to be clear and consistent communication to:
  - support vaccine uptake and address issues related to vaccine hesitancy. It is important that concerns are addressed in communications and not dismissed or ignored.
  - increase knowledge of the personal risks associated with not being vaccinated.
  - support those who cannot be vaccinated (i.e. how they can protect themselves).
  - inform and provide clarification around vaccine efficacy, the prioritisation process and why certain groups or individuals are not getting vaccinated.
  
- Local communication and engagement strategies should also consider the following:
  - incorporating insight work to understand community views and develop targeted and effective campaigns. This includes the use of behavioural science approaches to motivate those not inclined to have the vaccine and support myth busting.
  - ensuring communication strategies are culturally competent and specific, with resources in multiple languages, and using several media including the full breadth of social media channels. Tailored implementation measures should be applied across all priority groups.
  - identifying and addressing any gaps in knowledge regarding COVID-19 and the vaccine and develop resources and communications to address them. Where false information is identified, the correct information should be communicated as soon as possible.
  - ensuring contingency plans are in place to address issues such as adverse reactions to a vaccine and local anti-vaccination campaigns.
  - communications will need to change over time as new vaccines come onstream. Information on existing and new vaccines need to be made clearly available, including information on possible side effects.

#### ***ii. Using local insights and interventions to engage vulnerable and marginalised groups***

- Local insights and interventions are needed to increase coverage and address issues related to vaccine hesitancy. For example, representatives of affected communities (i.e. peers, community champions and local celebrities) can help to encourage vaccine uptake and ensure vulnerable groups and communities of interest have higher vaccine take up.
- Central to these efforts will be local community leaders, businesses, faith groups, sports clubs, local newspapers/radio as well libraries, schools and local shops.
- The third sector should also mobilise organisations behind clear plans with resourcing in place. Their support will be critical in helping to improve access and take up amongst vulnerable and marginalised groups and enabling the use of community venues.

### **iii. Limiting physical barriers to access**

- Accessibility and convenience of vaccination services are important determinants of vaccine uptake. Ensuring that there are good direct transport links to vaccination sites, in particular via public transport, is crucial.
- Invitations should provide clear and specific information, including where to go and how to get there, and offer a variety of convenient times and locations.
- Employers should also be encouraged to support staff to get the vaccine by ensuring there are no financial or time implications of them attending appointments.

### **3. Data & surveillance**

If the right data systems are not in place, large numbers of people could be missed from the vaccination programme.

For example, routine health records do not adequately capture inclusion health groups, their clinical vulnerabilities, or their vaccination status. Incomplete or inaccurate data and the need for complex data linkages or validation steps to identify and contact eligible people increase the likelihood of increasing existing inequalities, reducing public confidence, and slowing the pace of vaccine roll out.

#### **Key recommendations & considerations**

- Mechanisms and processes need to be in place to monitor who is and is not vaccinated, alongside plans to support communities where vaccine uptake is low.
- It is essential that the data systems that are developed are able to pick up individuals who have been missed or have not come forward for vaccination, flag particular settings and populations where uptake is low, identify cross border issues and provide lookbacks.
- The data systems developed need to interface with GP records. This will ensure that regardless of the setting in which a person is vaccinated, their vaccination status will be accurately reflected on their GP record.
- Coverage and scheduling need to also be carefully considered, especially given the complexity of the double dose and potential variation in the intervals between the doses of different vaccines.
- Locally relevant data sources and intelligence need to be utilised to monitor and detect inequalities. This can help to support the development of locally sensitive approaches to access and delivery, communication, and engagement that reduce inequalities by better meeting the needs of potentially marginalised high-risk individuals and population groups.
- Collaboration with public health colleagues across organisations, can also ensure that additional datasets held by other system partners can be accessed to support the identification of specific population groups and target specific activity to ensure improved access and more effective delivery.
- Local authorities should urgently be provided with a regular feed of the rolling immunisation data for each local authority area to ensure efficiency, equity and effectiveness of the programme for local residents. This data is not currently accessible in the public domain.

#### **4. Public trust and expectation management**

Given the current epidemiological situation in the UK, all evidence indicates that the best option for preventing morbidity and mortality in the initial phase of the programme is to directly protect persons most at risk of morbidity and mortality. This is clearly set out in the [advice](#) published by the JCVI on priority groups for COVID vaccination.

This approach, however, will not necessarily result in an immediate and significant reduction in overall transmission rates. There may also continue to be a high number of hospital admissions and cases of long COVID.

There is a concern that the vaccine roll out could act as a reset button with the public, resulting in behaviour change and a reduction in compliance with non-pharmaceutical interventions (NPIs).

#### **Key recommendations & considerations**

##### ***i. Clear national and local communications to manage expectations***

- There needs to be clear and consistent information to the public on the progress of the pandemic, the impact of the vaccination programme and the combination of measures required to reduce the spread and impact of the virus.
  - Vaccination cannot be the entire strategy. Non Pharmaceutical Interventions (NPIs), the Test and Trace Service and therapeutics remain a core part of the set of tools available to reduce the spread and impact of the virus.
  - There is not yet evidence on the ability of the vaccines to reduce the transmission of COVID-19. Continuing with other infection prevention and control measures remains vital until a sufficient number of people have been vaccinated and the desired population impact of the vaccine has been achieved.
  - Once evidence and data emerge on the impact of the vaccine programme on morbidity and mortality amongst vulnerable persons, the initial phase of the programme could allow for the subsequent relaxation of NPIs in some sectors of the population.
- Local councils, leaders and other key influencers will be essential to help promote these messages, support compliance with vaccination requirements and galvanise people and communities.

#### **The system leadership role of DsPH**

Successful mass campaigns are partnerships between communities and health systems and rely on trust and access to all communities. Local government – if resourced properly – could significantly enhance local delivery and build on strong partnership in localities working closely with acute, primary care and community services.

Local authorities understand the factors that promote effective interventions at scale including using local leaders to build trust, engaging with communities, and aligning national data with local systems. Highly effective emergency planning and health protection functions have delivered locally led approaches rooted in local public health, third sector and community support systems linked to the full range of partners such as education, faith and business.

DsPH have been at the core of the COVID-19 response and, given their extensive experience of vaccination programmes, are well placed to provide system leadership. The table in annex 1 outlines the contributions of DsPH in addressing some of the common issues related to vaccination.

Given the scale of this mass vaccination programme, not all will go as planned. Any unintended consequences will predominantly be felt locally, therefore it is essential that the DPH has oversight of the programme locally and is able to resolve issues in a timely manner. Strong alignment of national work and communications with local community engagement and interventions will be key to delivering results and maximising uptake.

## Annex 1

The table below outlines the contribution of DsPH in addressing some of the common issues related to vaccination.

Issue	Contribution of DsPH
<b>Fragmentation across the system</b>	<ul style="list-style-type: none"> <li>• DsPH often have jointly appointed senior public health colleagues embedded in NHS systems and are therefore well placed to provide a system leadership role.</li> <li>• The DPH works alongside the Director of Adult Social Services (DASS) to help develop pathways for vulnerable people.</li> </ul>
<b>Barriers to vaccine uptake</b>	<ul style="list-style-type: none"> <li>• DsPH have surveillance information to enable and support prioritisation, as well as experience of setting up data surveillance systems to ensure systematic coverage.</li> <li>• DsPH have experience of large-scale programmes in school health interventions. They also have extensive experience of sexual health and drug and alcohol services, enabling vaccination of their users who may be missed by other services.</li> </ul>
<b>Vaccine hesitancy</b>	<ul style="list-style-type: none"> <li>• DsPH are able to identify populations where vaccine uptake is low.</li> <li>• They have extensive experience of reducing vaccine hesitancy in vulnerable, excluded and marginalised populations to increase uptake.</li> <li>• Experience working with ethical refusal.</li> </ul>
<b>Safety &amp; governance</b>	<ul style="list-style-type: none"> <li>• DsPH provide public oversight and assurance of vaccine delivery and safety.</li> <li>• They support the production and co-ordination of Patient Group Directions.</li> <li>• They have experience conducting lookback exercises when things go wrong.</li> </ul>
<b>Public trust and communication</b>	<ul style="list-style-type: none"> <li>• DsPH have been a key source of communication and knowledge during COVID-19. The DPH is often the trusted local voice.</li> <li>• DsPH deliver strong local communications on safety, efficacy, and rationale for vaccination.</li> <li>• They provide targeted social marketing to increase uptake in particular groups in the community.</li> </ul>

<sup>1</sup> Williams, L., Gallant, A. J., Rasmussen, S., Brown Nicholls, L. A., Cogan, N., Deakin, K., ... & Flowers, P. (2020). Towards intervention development to increase the uptake of COVID-19 vaccination among those at high risk: Outlining evidence based and theoretically informed future intervention content. *British Journal of Health Psychology*, 25(4), 1039-1054. Accessed on 17.11.2020 at <https://doi.org/10.1111/bjhp.12468>

<sup>2</sup> Bell et al (2020). Parents' and guardians' views on the acceptability of a future COVID-19 vaccine: A multi-methods study in England. *Vaccine*, 38(49), 7789-7798.