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CHANGE

How to Vaccinate Key Workers

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Overview

This document sets out how we believe the government can prioritise the vaccination of key workers.

The existing plan in the UK is to vaccinate priority groups 1-4 by mid-February, and groups 5-9 after that.

The overriding priority for the government has been to minimise severe illness and prevent deaths among vulnerable groups.

Emerging evidence suggests vaccines reduce transmission of the virus, as well as providing protection. In order to further slow the spread of the virus and prepare to reopen society, we call on the government to vaccinate key workers.

We agree the government should prioritise those most at risk from Covid-19. However, as the situation changes, so should our plan. We set out [a note on this last week](#).

We believe any extra vaccine supply, plus any saved through avoiding wastage, should be given to priority key workers during the first phase of the vaccination programme (priority groups 1-4). Additional key workers would then be covered through a parallel stream of vaccination alongside priority groups 5-9. We set out options for how this stream could be set up. We also include a bespoke plan for teachers given the critical priority of reopening our schools. Existing supply should be used to vaccinate the top four priority groups by mid-February and should be kept for that purpose.

Top Lines

- Current government strategy is to vaccinate the most vulnerable. Emerging evidence suggests vaccination also reduces transmission of the virus. To protect frontline workers, reduce transmission of the virus and reopen the economy, it is vital and urgent that we vaccinate key workers.
- Vaccination of key workers could be done in two phases: First, using surplus vaccines to vaccinate key workers alongside priority groups 1-4 by mid-February; second, creating a parallel vaccination stream alongside priority groups 5-9.
- Recent data from Israel and early AstraZeneca trial data indicate that vaccines are effective at reducing disease occurrence and transmissibility of the virus.
- We must do all we can to get children back to school as quickly and as safely as possible. There are 500,000 full-time teachers in the UK. They could be vaccinated within a few days. One option for doing this would be slowing vaccination for priority groups 5-9 during the February half term to give first doses to teachers that week. This is a difficult decision. However, we believe extending the duration of vaccinating groups 5-9 by a couple of days is worth it, if it means teachers being better protected, staff absence being reduced and children returning safely to school.
- Recent data from Israel and early AstraZeneca trial data indicate that vaccines are effective at

reducing disease occurrence and transmissibility of the virus.

What Is the Government's Plan?

Table 1 – Priority groups 1-4, population and target vaccination dates

| JCVI Cohort | Priority Group | Population, England | Population, UK | Government Target |
|--------------------------|----------------|---------------------|----------------|--------------------------------|
| Care-Home Residents | 1 | 0.15m | 0.3m | 1 dose given to 100% by 15 Feb |
| Residential Care Workers | 1 | 0.4m | 0.5m | 1 dose given to 100% by 15 Feb |
| 80+ year olds | 2 | 2.8m | 3.3m | 1 dose given to 100% by 15 Feb |
| Health-Care Workers | 2 | 2m | 2.4m | 1 dose given to 100% by 15 Feb |
| Social-Care Workers | 2 | 1.2m | 1.4m | 1 dose given to 100% by 15 Feb |
| 75-79 year olds | 3 | 1.9m | 2.3m | 1 dose given to 100% by 15 Feb |

| | | | | |
|--|---|------|------|--------------------------------|
| 70-74 year olds | 4 | 2.7m | 3.2m | 1 dose given to 100% by 15 Feb |
| Clinically Extremely Vulnerable (Under 70) | 4 | 1.0m | 1.2m | 1 dose given to 100% by 15 Feb |
| Total | | ~12m | ~15m | 15m with 1 dose by 15 Feb |

Table 2 – Priority groups 1-9

Priority Risk Group

| | |
|---|---|
| 1 | Residents in a care home for older adults and staff working in care homes for older adults |
| 2 | All those 80 years of age and over and frontline health and social-care workers |
| 3 | All those 75 years of age and over |
| 4 | All those 70 years of age and over and clinically extremely vulnerable individuals (not including pregnant women and those under 16 years of age) |

Priority Risk Group

5 All those 65 years of age and over

6 Adults aged 16 to 65 years in an at-risk group (see clinical conditions below)

7 All those 60 years of age and over

8 All those 55 years of age and over

9 All those 50 years of age and over

Who Do We Propose Vaccinating?

We propose vaccinating key workers in the order set out below. We would work through the list by focusing first on priority key workers during phase one (while priority groups 1-4 are being vaccinated) and then additional key workers in phase two.

Priority Key Workers

- **First responders (fire services, ambulance and police):** 211,000
- **Food and necessary goods workers:** circa 1.5 million people work in food retail
- **Pharmacy staff:** circa 40,000
- **Vaccine pipeline (all workers involved in the production, distribution and trialling of the vaccine, including manufacture of vaccines for variants):** circa 3,000
- **Total:** circa 1.75 million people

Additional Key Workers:

- **All teachers:** circa 500,000
- **Key travel workers:** circa 600,000
- **Key retail staff:** There are around 2.9 million retail workers in the UK. Only a proportion of these are in frontline, public-facing roles, and many fall in the food and necessary goods category. There are 287,000 retail outlets in the UK.
- **Key hospitality workers:** Around 3 million people work in hospitality and tourism. Again, only a proportion of this number work in frontline roles.
- **Total:** The government should work with industry and unions to identify precise numbers of frontline staff in these sectors. Those most in contact with the public should be prioritised. We believe a number of 3 million is a helpful estimate to start with (based on vaccinating all teachers, key transport workers and at least two people in each retail outlet, as well as half of all hospitality workers).

When Would They Be Vaccinated?

- Existing supply to vaccinate the top four priority groups by mid-February should be kept for that purpose. Where additional supply is available, either through avoiding wastage or access to further quantities of the vaccine, it should be used to begin covering the priority key workers we identify.
- After the government has vaccinated the top four priority groups we then advocate that a separate, parallel stream be established to work through vaccinating key workers, in the priority order set out above, alongside the process for vaccinating priority groups 5-9.
- We propose a bespoke plan for teachers, in order to reopen schools as soon as possible.

Why Vaccinate Teachers?

We believe it is vital we get schools open as quickly as possible. It is critical not just in terms of educating our children but also in terms of reopening society.

Below are four core priorities we believe are central to this decision:

1. Ultimately, this is about an objective alongside protecting the most vulnerable: We must do all we can to get our children back safely in school.
2. It is primarily about protecting teachers and ensuring there are no unnecessary absences – we need a full teaching workforce to implement other school safety measures.
3. The evidence on transmission is emerging but promising. Studies to date show us that the majority of transmissions in schools are through teaching staff. Vaccinating them will have a disproportionately positive impact.
4. Vaccination sits alongside other measures – including testing and social distancing.

When Do We Vaccinate Teachers?

We believe teachers form a special category of frontline worker. Our children's education is crucial for the future of the country. This is true not just for the children themselves but to allow parents to engage fully with work.

We believe there are two options for how to vaccinate teachers.

1. Utilise half term to vaccinate all teachers. There are currently 506,400 full-time teachers in the UK. They could be vaccinated within two days, if we pause the vaccination of priority groups 5-9.
2. Vaccinating key workers alongside groups 5-9 through a parallel stream. This would be slower than option one, but would still see all 506,000 teachers vaccinated this spring.

These options should be urgently investigated by the government. We cannot reopen our economy and society or give our kids the education they need while schools are shut.

If We Go With the Half-Term Option, Why Should Teachers Be Prioritised Over the Most Vulnerable?

They shouldn't. Under our plan, nine out of ten people who are most susceptible to death would already have been vaccinated before the half term begins. This approach may add between two and four extra days to the vaccination of groups 5-9, but the prize is huge: **a safer, quicker reopening of schools.**

We are not ignoring the science here. This is a question of leadership and making difficult choices: **We must do everything we can to get kids back to school – safely.** This requires action now.

- We must protect teachers. They have to be vaccinated before schools open and allow enough time for an immune response to kick in (12 days). If the government can't say when they'll be vaccinated, then they will be left in a position where either they are unable to say when schools will open, or they will need to confirm that they are happy for schools to reopen without teachers being vaccinated.
- This is a call to open schools up safely and sustainably. We must recognise that for this to happen, they need a full workforce – at times there were over 25,000 teachers off work with Covid-19, and some schools lost as much as a fifth of their workforce to absence.
- By choosing the half-term break, nine out of ten people most susceptible to death from Covid-19 would still be protected, as we won't start vaccinating teachers until groups 1-4 have been vaccinated (the government has promised a deadline of 15 February for this).
- Half term would also be viable for logistical, NHS capacity and safety reasons, because it allows schools to continue remaining open for key workers now, and we know that protection starts 12 days after the first dose. We must give time for that to take effect. Wait any longer, and there are questions about when exactly schools can reopen in this academic year.
- Reduce transmission between teachers, and you reduce around two-thirds of secondary infections in schools. The data on the impact of vaccines on transmission is extremely promising – both AstraZeneca trial data and the comprehensive study in Israel show this. We need to wait for this data to become more concrete, but this plan prepares us.
- This doesn't replace existing safety measures in schools. It enhances them by ensuring a full workforce.

Does Vaccination Reduce Transmission?

- Recent data from Israel and early AstraZeneca trial data indicate that vaccines are effective at reducing disease occurrence and transmissibility of the virus.
- The data from Israel's highly effective vaccine rollout suggest transmissibility is reduced,¹ and phase III data on the AstraZeneca vaccine (which is easier to store and administer than the Pfizer vaccine) indicated that the "vaccine could reduce virus transmission from an observed reduction in symptomatic infections". The evidence is continuing to build positively in both instances.
- A recent serological study found that participants who have received both doses of the Pfizer/BioNTech coronavirus vaccine have developed six to 20 times more antibodies than those who have recovered from the virus, Sheba Medical Center said in a statement.²
- Given this data on antibodies, there is a clear indication that the vaccine can cut transmission after two doses. Covid-19 infection rates have dropped significantly among those getting the second jab compared to the first in Israel.³
- An Israeli Health Ministry study found that 82,567 people were infected within a week of getting their first shot, but only 4,500 after 15 days.⁴
- According to Israeli broadcaster Channel 12, preliminary research by health-care provider Maccabi said the first dose of the vaccine reduced the risk of catching coronavirus by 60 per cent after 14 days.⁵
- A similar study by Clalit, another Israeli health-care provider, put the figure at 33 per cent after testing 200,000 citizens who had received their first vaccination.⁶
- According to the Telegraph, these early studies are the first indications that a Covid-19 vaccine, in this case the Pfizer vaccine, may stop transmission.

This information, particularly that emerging from Israel, requires a fresh look at who is prioritised for vaccination.

How Much of the Vaccine Are We Wasting?

- GPs have been told not to waste more than 5 per cent of Covid-19 vaccines provided to them. This could amount to as many as 20,000 vaccines per day.
- The government is not currently publishing specific data on vaccine wastage and we urge them to do so as soon as possible.
- Public Health Wales has begun publishing data on vaccine waste, and as of 5 pm on 21 January, 0.5 per cent of Pfizer/BioNTech and 0.1 per cent of Oxford/AstraZeneca vaccine doses delivered to health boards were reported as not suitable for use.⁷
- The reasons for these vaccines not being used was reported as a result of failing quality assurance on initial inspection, doses failing quality assurance following preparation, and vials/doses which expire during the vaccination session. (Vaccines must be used within six hours of being opened)⁸

What Does This Plan Mean for Supply?

In terms of supply we propose the following:

1. Any additional supply received by the UK during the vaccination of priority groups 1-4 should go to the groups of key workers we identify. Additionally, any amounts of the vaccine saved through avoiding wastage (potentially 10,000 per day) should be used for this group.
2. After priority groups 1-4 have been vaccinated we propose creating a parallel stream to vaccinate key workers alongside priority groups 5-9. While this may delay how quickly groups 5-9 get the vaccine, we believe it is important frontline key workers are also given priority, not just to protect them but also to help inhibit transmission of the virus.

There are various options for this parallel stream. The government could:

- Divert a percentage of existing daily vaccine supply (estimated to be 500,000).
- Make any amounts of the vaccine above the 500,000 per day threshold available for key workers.
- Pause vaccinating other groups for specified periods to cover key workers. (At an estimated 500,000 vaccines per day it would take 10 days to cover the 5 million key workers identified in our plan).

Footnotes

1. ^ <https://www.jpost.com/health-science/antibodies-increase-by-6-to-20-times-after-second-pfizer-dose-sheba-655861>
 2. ^ <https://inews.co.uk/news/world/covid-vaccine-israel-vaccination-roll-out-transmissibility-programme-palestine-834999>
 3. ^ <https://inews.co.uk/news/world/covid-vaccine-israel-vaccination-roll-out-transmissibility-programme-palestine-834999>
 4. ^ <https://inews.co.uk/news/world/covid-vaccine-israel-vaccination-roll-out-transmissibility-programme-palestine-834999>
 5. ^ <https://inews.co.uk/news/world/covid-vaccine-israel-vaccination-roll-out-transmissibility-programme-palestine-834999>
 6. ^ <https://inews.co.uk/news/world/covid-vaccine-israel-vaccination-roll-out-transmissibility-programme-palestine-834999>
 7. ^ <https://www.walesonline.co.uk/news/health/wales-reveals-how-much-coronavirus-19700809>
 8. ^ <https://www.walesonline.co.uk/news/health/wales-reveals-how-much-coronavirus-19700809>
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