From the Chief Medical Officer
Dr Michael McBride

Department of Health
An Roinn Sláinte
Männystrie O Poustie
www.health-ni.gov.uk

HSS(MD)4/2021

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Our Ref: HSS(MD)4/2021
Date: 8 January 2021

FOR ACTION
Chief Executives, Public Health Agency/Health and Social Care Board/HSC Trusts/ NIAS
GP Medical Advisers, Health & Social Care Board
All General Practitioners and GP Locums (for onward distribution to practice staff)
OOHs Medical Managers (for onward distribution to staff)
RQIA

PLEASE SEE ATTACHED FULL CIRCULATION LIST

Dear Colleague

TIMING OF INTERVAL BETWEEN COVID-19 VACCINE DOSES

ACTION REQUIRED

Chief Executives must ensure this information is drawn to the attention of all staff.

The PHA must ensure this information is cascaded to their staff working on COVID-19 vaccine deployment and the health protection team.

The HSCB must ensure this information is cascaded to all General Practitioners and practice managers for onward distribution to all staff involved in the COVID-19 vaccination programme.

INTRODUCTION

1. Further to HSS(MD)93 and HSS(MD)94 I thought it would be useful to provide some further information on the change to the length of the interval between doses of a COVID-19 vaccine and some information in relation to the ongoing vaccination programme. The MHRA is the UK competent authority on this matter and it updated the dosage interval recommendations for the Pfizer/BioNTech vaccine following a thorough review of the data by their COVID-19 Vaccines

Benefit Risk Expert Working Group. This expert group concluded that vaccine efficacy will be maintained with dosing intervals longer than 21 days, as specified in the Information for Healthcare Professionals document. This is entirely in line with the Conditional Marketing Authorisation issued to Pfizer/BioNTech by the European Medicines Agency on 21 December. In their statement, the MHRA remarked:

"This conclusion was based on clinical trial data that showed the vaccine was 90.5% effective against preventing COVID-19 after the first dose once the protection that starts at around 12 days kicks in, and there was no evidence to suggest that the effectiveness of the vaccine is declining towards the end of the 21-day period following the first dose."

2. The Joint Committee on Vaccination and Immunisation (JCVI) has also estimated that short term vaccine efficacy from the first dose of the Pfizer-BioNTech vaccine is calculated at around 90%, and short term vaccine efficacy from the first dose of the AstraZeneca vaccine is calculated at around 70% (efficacy estimates are not directly comparable between the two vaccines).

3. Given the high level of protection afforded by the first dose, and modelling which suggests that initially vaccinating a greater number of people with a single dose will prevent more deaths and hospitalisations than vaccinating a smaller number of people with two doses, the JCVI therefore recommended a prioritisation scheme and a strategy of prioritising first does of vaccines to as many people as possible.

4. It should be noted that they state that the second dose is still important to provide longer lasting protection and is expected to be as, or more, effective when delivered at an interval of up to 12 weeks from the first dose. Everyone will still receive a second dose of the same COVID-19 vaccine that they received as a first dose.

5. When considering vaccination schedules JCVI often considers first principles, and regularly advises schedules which differ from the marketing authorisation. In every case, the advice of JCVI is aimed at maximising protection in the population.

6. It should also be noted that the members of JCVI and the COVID-19 Vaccines Benefit Risk Expert Working Group are independent experts with extensive experience in this area, and based their recommendations on their independent consideration of all of the relevant data.

7. The published efficacy of the Pfizer vaccine in the period between dose 1 and 2 was 52.4% (95% CI 29.5-68.4%). Based on the timing of cases accrued in the phase 3 study, most of the vaccine failures in the period between doses occurred shortly after vaccination, the period before any immune response is expected. Using publicly available data for days 15 and 21 after the first dose, efficacy

against symptomatic COVID-19 was estimated at 89% (95% CI 52-97%), suggesting that short term protection from dose 1 is very high from day 14 after vaccination. Similar findings were seen with the Moderna mRNA vaccine out to 108 days after the first dose.

8. The level of protection gained from a single dose of the AstraZeneca vaccine was assessed in an exploratory analysis. Vaccine efficacy from 22 days post dose 1 was 73% (95% CI 48.79-85.76). High protection against hospitalisation was seen from 21 days after dose 1 until two weeks after the second dose, suggesting that a single dose of the AstraZeneca will provide high short-term protection against severe disease. Protective immunity from the first dose likely lasts for a duration of 12 weeks.

9. The JCVI also noted that, as is the case with most vaccines, an extended interval between the prime and booster doses leads to a better immune response to the booster dose. There is evidence that a longer interval between the first and second doses promotes a stronger immune response with the AstraZeneca vaccine. There is currently no strong evidence to expect that the immune response from the Pfizer-BioNTech vaccine would differ substantially from the AstraZeneca and Moderna vaccines.

10. Having fully considered the available data, in line with the MHRA approval and the recommendations of the JCVI, the 4 UK CMOs were satisfied that an extended interval between vaccine doses together with initial prioritisation of the first vaccine dose will increase the deployment vaccine supply in the short term and significantly reduce the chances of the most vulnerable getting severe disease. This will allow for more first doses to be delivered to more people earlier, protecting more from severe disease. This will include health care workers and will provide maximum protection to our health service at this critical time.

11. This position has been supported by the British Society for Immunology, the professional body representing scientists and clinicians who study the immune system as well as the Scottish Academy of Medical Royal Colleges and Faculties , the Royal College of General Practitioners, and other professional bodies.

12. Given the scientific evidence and the public health imperative to protect as many people as quickly as possible I can envisage that there will be very few, if any circumstances, where this advice should not be followed and I would expect this policy to be applied to ALL staff. For example, receipt of one or two doses of a COVID-19 vaccine will not immediately change the circumstances for staff who belong to the clinically extremely vulnerable risk group and therefore this should not be considered a valid reason for receiving a second dose before the 10 week interval.

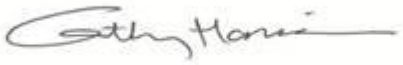
13. While I can understand the frustration of those who have been advised that the date to receive a second dose of a COVID-19 vaccine has been pushed back by a number of weeks, I would hope that they will see the bigger picture and realise that this is essential at this time in order to provide double the number of people with a substantial amount of protection from COVID-19. Protecting a larger proportion of the HSC workforce and population will make an enormous

difference to the impact of COVID-19 on the HSC service over the next few months and it is essential we achieve this.

Yours sincerely

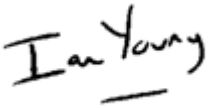
Dr Michael McBride
Chief Medical Officer

Professor Charlotte McArdle
Chief Nursing Officer



Mrs Cathy Harrison
Chief Pharmaceutical Officer

Sean Holland
Chief Social Services Officer



Ian Young
Chief Scientific Officer

Michael Donaldson
Acting Chief Dental Officer

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Trade Union Side

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