

BTS Guidance: COVID-19 Vaccination – information for health care professionals

Introduction

This document provides information for respiratory health care professionals in relation to the current COVID-19 vaccination programme and covers issues that may arise in discussion with patients. This might include questions around safety or immune responses from patients with chronic respiratory disease, or on immunosuppression for lung conditions as well as more general questions around vaccines/immunisation programme, including Influenza, and pneumococcal vaccines.

We also highlight the role of respiratory healthcare professionals as advocates for vaccination. A significant constituency of patients may be fearful or sceptical of vaccination and a consistent message from healthcare professionals can help counter this. It is vital that vaccination uptake amongst persons with respiratory conditions for pneumonia prevention is improved. As an example, flu vaccine uptake in patients under 65 years with chronic lung disease is usually at best 50% of the eligible cohort. In all persons >65 years, it is 70 - 75%.

Priority groups for COVID-19 vaccination

For the latest information on the COVID-19 vaccination programme a series of links to government and PHE resources is provided below. Advice from the Joint Committee on Vaccination and Immunisation (JCVI) is that COVID-19 vaccines will initially be deployed according to the following priority groups:

- 1: residents in a care home for older adults; staff working in care homes for older adults
- 2: all those 80 years of age and over; frontline health and social care workers
- 3: all those 75 years of age and over
- 4: all those 70 years of age and over, Clinically Extremely Vulnerable Individuals (not including pregnant women and those under 16 years of age)
- 5: all those 65 years of age and over
- 6: adults aged 16-64 years who are in a risk group
- 7: all those 60 years of age and over
- 8: all those 55 years and over
- 9: all those 50 years and over.

<https://www.gov.uk/government/publications/priority-groups-for-coronavirus-covid-19-vaccination-advice-from-the-jcvi-30-december-2020>

Persons considered clinically at-risk

The [PHE Green Book Chapter 14a \(Table 3\)](#) lists the following Chronic Respiratory Disease clinical risk groups aged 16 and over who should receive the COVID-19 Vaccine:

Individuals with a severe lung condition, including those with asthma that requires continuous or repeated use of systemic steroids or with previous exacerbations requiring hospital admission; and chronic obstructive pulmonary disease (COPD) including chronic bronchitis and emphysema; bronchiectasis, cystic fibrosis, interstitial lung fibrosis, pneumoconiosis and bronchopulmonary dysplasia (BPD).

Of note, it also includes patients on immunosuppressive medications such as chemotherapy, radical radiotherapy, primary immunodeficiencies, and patients receiving immunosuppression including Mycophenolate mofetil, Rituximab, and systemic steroids at a daily dose equivalent to Prednisolone 20mg for a month or more.

Clinically extremely vulnerable patients

Individuals at especially high risk of complications of COVID-19 are defined Clinically Extremely Vulnerable (CEV). Person groups included in the CEV list are determined by a central committee led by the Deputy Chief Medical Officer, and signed off by the four UK Chief Medical Officers. The most recent CEV listing is found at: (<https://www.gov.uk/government/publications/guidance-on-shielding-and-protecting-extremely-vulnerable-persons-from-covid-19/guidance-on-shielding-and-protecting-extremely-vulnerable-persons-from-covid-19#cev>). These persons should already be flagged on their GP systems. A hospital clinician or GP can also add a patient to the list, based on their clinical judgement, because they consider them to be at very high risk of serious illness from COVID-19.

CEV persons include the following groups with *Respiratory Disorders*:

- have had an organ transplant, including a lung transplant
- are having chemotherapy or antibody treatment for lung cancer, including immunotherapy
- are having an intense course of radiotherapy (radical radiotherapy) for lung cancer
- are having targeted cancer treatments that can affect the immune system (such as protein kinase inhibitors or PARP inhibitors)
- have been told by a doctor you have a severe lung condition (such as cystic fibrosis, severe asthma or severe COPD)
- are taking medicine that makes you much more likely to get infections (such as high doses of steroids or immunosuppressant medicine)

(All CEV persons are expected to be within the clinical at-risk group – [PHE Green Book Chapter 14a, Table 3](#)).

Are there any groups of patients who should NOT receive the vaccine?

Children and young people

There are very limited data on safety and efficacy of vaccination in children and young people and COVID-19 vaccines are not routinely recommended for children and young people under 16 years of age.

Further advice is available from the British Paediatric Respiratory Society:

<https://www.brit-thoracic.org.uk/about-us/covid-19-identifying-patients-for-shielding/#current-official-shielding-guidance-for-children-and-young-people>

Contraindications

The PHE Green Book provides the following advice:

There are very few individuals who cannot receive the Pfizer-BioNTech or AstraZeneca COVID-19 vaccines. Where there is doubt, rather than withholding vaccination, appropriate advice should be sought from the relevant specialist, or from the local immunisation or health protection team.

The vaccine should not be given to those who have had a previous systemic allergic reaction (including immediate-onset anaphylaxis) to:

- a previous dose of the same COVID-19 vaccine
- any component (excipient) of the COVID-19 vaccine

<https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a>

Advice for pregnant women and those who are breastfeeding

Please see the advice on the ROG website here: [Updated advice on COVID-19 vaccination in pregnancy and women who are breastfeeding \(rcog.org.uk\)](https://www.rcog.org.uk/updated-advice-on-covid-19-vaccination-in-pregnancy-and-women-who-are-breastfeeding)

General and specific advice on respiratory conditions

None of the current vaccines for COVID-19 are 'live' vaccines and so they can safely be given to individuals who are immunosuppressed (the Oxford/AZ vaccine contains an adenovirus vector but this is non-replicating and is hence safe). Most individuals with immunosuppression will develop some immune responses, and ongoing shielding will offset a reduced effect. As discussed below, timing of vaccine may be important - and may need to be discussed on a case by case basis balancing benefits and risks of whatever strategy is proposed. Continuing immunosuppression for underlying serious lung conditions is important and should not be stopped to try to enhance immune responses.

It is important to note that even after vaccination **social isolating advice should continue to be observed**; this is especially important in those where the immune response may be blunted.

Advice on patients treated with Rituximab

Patients who are treated with Rituximab may receive the vaccine although this treatment may render the vaccine less effective and suppress vaccine responses.

Ideally, a pulse of Rituximab should be given at least 4 weeks after a dose of the COVID-19 vaccine. For patients receiving non-urgent/maintenance Rituximab, consider deferring a Rituximab course until 4 weeks after a dose of the COVID-19 vaccine, if clinically possible. For patients with organ-threatening disease, this may not be possible, and alternative therapies may not be effective. Rituximab should not be delayed in such cases, and concomitant administration of vaccine and Rituximab may be required. Delaying vaccination (particularly when prevalence of COVID-19 is high), is not recommended.

For patients who are not yet immunosuppressed but where immunosuppression is being planned, the current advice in the [Green Book](#) states that:

The small number of patients who are about to receive planned immunosuppressive therapy should be considered for vaccination prior to commencing therapy (ideally at least two weeks before), when their immune system is better able to make a response. Where possible, it would also be preferable for the 2-dose schedule to be completed prior to commencing immunosuppression. This would entail offering the second dose at the recommended minimum for that vaccine (three or four weeks from the first dose) to provide maximum benefit that may not be received if the second dose was given during the period of immunosuppression. Any decision to defer immunosuppressive therapy or to delay possible benefit from vaccination until after therapy should not be taken without due consideration of the risks from COVID19 and from their underlying condition.

Advice for other patients receiving immunosuppression

Again, immune responses may be blunted when taking regular systemic steroids or other combinations of oral immunosuppression such as Methotrexate or Mycophenolate mofetil. However, control of the

underlying lung condition is a priority, and regular daily medications should not be stopped to allow vaccination. Similarly, vaccination should not be delayed when offered.

Advice for Organ Transplant recipients

See advice from the British Transplantation Society:

<https://bts.org.uk/wp-content/uploads/2020/12/December-2020-BTS-position-statement-vaccination-in-solid-organ-transplant-recipients-FINAL-002.pdf>

Advice for patients treated with a biological therapy for Asthma

Patients with asthma treated with biological therapy are included in the ‘clinically extremely vulnerable’ group. There are no data to indicate the Pfizer/BionNTech or AstraZeneca COVID-19 vaccine is unsafe or contraindicated in this group of patients and they should be urged to receive the vaccine when it is offered. Patients should not miss a dose of their asthma biologic. To avoid incorrect attribution of potential adverse events, patients should be advised not to receive the vaccine and their biological therapy on the same day and if possible, a 7 day interval between the vaccine and asthma biologic is advisable.

Frequently asked questions

1) Can I have a flu vaccination or the pneumonia vaccination at the same time as a COVID vaccine?

It is advised that there is a seven day gap between giving the flu/pneumococcal vaccines and a COVID-19 vaccine.

2) Which COVID vaccine should I have?

You should take whichever vaccine you are offered. There is currently no evidence that either vaccine is more or less effective for patients with respiratory conditions.

3) Should I stop taking any of my medications (such as immunosuppressive medications) to make sure the vaccine works well?

We would not advise any change in a patient’s treatment as doing so might destabilise the underlying lung condition which in itself could be hazardous. In some cases, delaying planned infusions of eg Rituximab may be possible (see above), but regular maintenance therapies such as long term steroids, methotrexate should not be stopped.

4) I have been suffering from Long COVID – does this mean I shouldn’t have the vaccine?

There are no data to suggest that the vaccine would cause symptoms of Long COVID to be made worse. It is hoped that vaccine-induced immunity to SARS-CoV2 will be superior to naturally acquired immunity and so it is advised that individuals who have already had the infection should still have the vaccine once fully recovered.

5) I have been in a COVID vaccine trial and now been offered a vaccine. What should I do?”

Most vaccine trials will allow you to find out if you received the placebo or the vaccine, and this will allow you to decide if you require to be vaccinated through the NHS scheme.

6) What is the rationale for changing the interval between first and second doses?

The JCVI statement can be found here: <https://www.gov.uk/government/publications/prioritising-the-first-covid-19-vaccine-dose-jcvi-statement>

Please note:

Information in this statement is likely to change rapidly. Advice should be based on updated guidance and will depend on the individual clinical situation.

Useful Links

Further advice can be found via the links below:

Highly recommended: Green Book Chapter on COVID-19.

<https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a>

England

[Coronavirus \(COVID-19\) vaccine - NHS \(www.nhs.uk\)](https://www.nhs.uk)

[COVID-19 vaccination: a guide for women of childbearing age, pregnant, planning a pregnancy or breastfeeding - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

[COVID-19 vaccination: consent form and letter for healthcare workers - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

[Priority groups for coronavirus \(COVID-19\) vaccination: advice from the JCVI, 2 December 2020 - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

[Covid-19 Vaccine - Coronavirus Resource centre \(phe.gov.uk\)](https://phe.gov.uk)

[Flu vaccine - NHS \(www.nhs.uk\)](https://www.nhs.uk)

Scotland

[Coronavirus \(COVID-19\) vaccine | NHS inform](https://www.nhs.uk)

Wales

[COVID-19 vaccination information - Public Health Wales \(nhs.wales\)](https://www.nhs.uk)

Northern Ireland

[COVID-19 vaccination programme in Northern Ireland | nidirect](https://www.nidirect.gov.uk)

Information for people with lung disease:

<https://www.blf.org.uk/support-for-you/coronavirus/coronavirus-vaccine>

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