

Winter Flu and Covid-19 Vaccination (FVCV) Programme 2023
At-Risk Cohorts
Information for NHS Boards – Update 8 August 2023

1. Introduction

1.1 The Joint Committee on Vaccination and Immunisation (JCVI) published [advice](#) on eligibility for COVID-19 vaccination for the winter 2023 FVCV programme on 8 August 2023. A CMO letter for the COVID-19 Vaccination programme will follow the publication of the advice in due course. The CMO letter, dated 18 April 2023, detailing eligible cohorts for the winter 2023 seasonal flu vaccination is available as [CMO\(2023\)05](#) and the CMO letter dated 6 June 2023 for seasonal flu vaccination for children is available as [CMO\(2023\)09](#).

As the work to derive the at-risk cohorts was required to be commenced in advance of the JCVI advice being published and the Green Book chapters being updated, permission was sought and received from the Deputy CMO, Scottish Government to commence the cohort derivation based on the current Green Book chapter specifications for Flu and COVID-19 vaccination. This guidance will be modified accordingly once the Green Book Chapter is updated.

1.2 This document details some of the information for NHS Boards relating to the at-risk cohorts for Flu vaccination and Covid-19 vaccination for Winter 2023. Guidance will be added to incrementally as JCVI advice is received.

1.3 NHS Boards will be supplied with a series of cohort files via the SEER platform, which is to be used to schedule an appointment or a prompt for the winter programme 2023.

2.0 Data Sources for Cohort Identification of At-Risk for Flu and / or Covid-19

2.1 Data is derived from 3 sources:

1. General Practice information (GPIT) systems
2. Those who are eligible for extra Covid-19 treatments (nMAB/Antiviral cohort updated on a monthly basis by PHS using a range of sources as detailed within Appendix). These are included as they will highlight people who may not be identified through GP IT searches, such as those on the Chemocare list or with specified medications that are provided by secondary care and may indicate immunosuppression. As all patients eligible for COVID-19 vaccination are also eligible for flu vaccination, these data are only included in the at-risk of COVID-19 cohorts. Please note that many people identified via nMABs / anti-viral eligibility meet the immunosuppressed criteria and this will only be complete in the COVID-19 files.
3. Scottish Hospital Records (SMR01) for Asthma admissions (Flu = ever admitted / Covid-19 = admission in last 2 years). This has been included to augment the searches within GPIT systems.

2.2 Only CHI numbers will be taken from these data sources and matched to the national CHI file to obtain the latest names and addresses as at that point in time. Only the latest CHI

record with an Extended Status = Current will be taken. This means that to the best of our knowledge these records are active and registered with a Scottish GP.

2.3 NHS Board of Residence is derived using the NRS Postcode reference file. In addition to Scottish residents, we will also include English Border residents (Northumberland and Cumbria) who are currently registered with a Scottish GP.

4.0 Differences between the At-Risk cohorts for Flu and Covid-19

4.1 Health Boards will be provided with cohort files in order to derive their local Board files for scheduling of the flu only cohort for those aged 50-64 years and those who are at risk who are aged 18-49 years. Furthermore, a combined Flu and Covid-19 eligibility file for those age 12-64 years to simplify the scheduling process and to enable vaccination at the same time for this cohort. However, there are differences in the eligibility criteria for these two vaccines as defined in the [Green Book](#) (Immunisation against Infectious Disease). From a policy perspective, it has been agreed that anyone who is eligible for a Covid-19 vaccination should be eligible for Flu vaccine also. Therefore, those with, Epilepsy or Severe Mental Health illness, who have been identified as eligible for Covid-19, can also receive the Flu vaccination.

4.2 There are specific groups of people who are eligible for Flu vaccination but would not be eligible for Covid-19 vaccination. These are -

- Those with mild or moderate asthma, who are receiving inhaled steroids but have not required two or more courses of oral steroids for their asthma in the last 2 years, or have not had a hospital admission due to asthma deterioration in the last two years. If they have required oral steroids or had an asthma admission in the last two years then they are eligible for Covid-19 vaccination.
- Children with Thrombo-embolic Disease are eligible for Flu vaccination but not for Covid vaccination. Note that previous cohorts in 2022 and Spring 2023 may have erroneously included some children with Thrombo-embolic disease for Covid vaccination. This has now been corrected and these children will not be identified. They will be eligible for Flu vaccination.

4.3 For the adult at-risk combined file, the school-based programme will be delivering Flu vaccines to some young people in the 16-20 year age group. Very few are likely to be 19-20 years of age, however it should be noted that some in a specialist setting may remain in the school education system. It is therefore important for vaccinators to check if an individual at school has already received their Flu vaccination. Boards have been requested to, and have indicated that they will be, using the Vaccination Management Tool (VMT) for school delivered Flu vaccines, and this Flu vaccination should show within VMT when the individual presents for Covid-19 vaccination. Vaccinators need to be aware that, it is possible some in the 16-20 year age group may present for Covid-19 vaccination but are only eligible for Flu

vaccination, which they may have already received in the school setting. This mainly applies to those with mild asthma see also paragraph 4.2.

4.4 It is appreciated that, without access to medical records, it may be challenging to identify and assess this group of people as to whether they require both vaccines or only Flu. Vaccinators are not expected to engage in difficult or awkward conversations, but they must be satisfied / should ensure that they are comfortable that the person meets the Green Book definition of poorly controlled asthma for COVID-19 vaccination i.e. ≥ 2 courses of oral corticosteroids in the preceding 24 months OR on maintenance oral corticosteroids OR ≥ 1 hospital admission for asthma in the preceding 24 months.

5.0 Difference Between Adult and Child Criteria

5.1 For those aged 5-15 years – scheduled appointments will be Covid-19 only.

5.2 For Flu the same at-risk criteria applies to all ages.

For Covid-19 the at-risk eligibility criteria differ between Child (aged 6months to 4 years), Child (aged 5-15 years) and Adult (aged 16-64 years), although there is considerable overlap (see Tables 3 and 4 of chapter 14a in The Green Book). To summarise these differences are:

- Adult criteria includes Thrombo-embolic Disease, Severe Mental Health, Obesity and Carers. These are excluded from the Child criteria.
- Child criteria includes Chronic conditions of Digestive system (included Gastro-oesophageal Reflux in the last 3 years and Inflammatory Bowel Disease) and Autism. These are excluded from the Adult criteria. However, Child age 6m – 4 years does not include Gastro-oesophageal reflux as this identified large numbers of children coded with self-limiting reflux as an infant.

5.3 The cohorts will include people who turn from one age range to another. As per previous cohorts, those aged 4 years and turning 5 years during the programme, will be included in the 6m – 4 years cohort file and those aged 11 years, turning 12 years will be included in the 5-11 years cohort file.

5.4 Please note that information on the 6months – 4 years cohort will be supplied in due course.

5.5 Guidance on 11-year-olds turning 12 years between 1/9/23 and 31/3/24.

The cohort file for scheduling winter 2023 booster vaccination for those at risk who are 5-11yr olds (DOB cut off for being aged 5yrs is 1/9/23), will include some children who will turn 12 years of age between 1/9/23 and 31/3/24.

For spring 2023, we produced a table that set out which vaccine different individuals would receive, based on their dosage history. We intend to replicate this and disseminate it to Boards once we have confirmation of JCVI advice on vaccine choice and the updates to the Green Book Chapter for the winter programme.

After those details are confirmed, Boards should ensure that the 5-11 year weakened immune system data file is scrutinised to check on previous vaccination status so that appointments are made for vaccination clinics which will have the appropriate vaccine stock for the child's requirements, depending on their age at vaccination.

6.0 Cohort Files supplied to Boards for the preparation of scheduling files for winter 2023 vaccination cohorts:

- **AGE_50_TO_64** – this file contains 1,231,143 records representing the full Scottish population for this age group.
- All Scottish residents aged ≥ 50 years are eligible for flu vaccination.
- To identify patients aged 50-64 years who only have a risk factor for flu, these can be identified by using the file below. After this identification the remaining records will be those eligible for both flu and COVID vaccination.
- **AGE_12_TO_64_COVID_AT_RISK** – this file contains 796,530 records for patients who have a risk factor for COVID.
- **AGE_18_TO_49_FLU_AT_RISK** – this file contains 384,443 records for patients who have a risk factor for flu. As this file also contains patients who also have a risk factor of COVID, these records can be identified using the file above.

6.1 Update as at 8 August 2023

Three additional cohorts have been loaded:

- **AGE_65_TO_74** – this file contains 630,184 records representing the full Scottish population for this age group.
- **AGE_75 and over** – this file contains 551,943 records representing the full Scottish population for this age group.
- **AGE_6_MONTHS_TO_74_WEAKENED_IMMUNE_SYSTEM** - this file contains 131,316 records for patients with a weakened immune system (includes immunosuppressed and severely immunosuppressed).

7.0 Exclusions

7.1 These cohort files **do not** exclude people who may have previously declined either vaccine or been noted as being contra-indicated or allergic to any of the Flu or Covid-19 vaccines.

7.2 Pregnant women will be included within this specification if they meet one of the at-risk criteria **but are not specifically identified because of pregnancy**. Pregnant women are eligible for both Flu and Covid-19 vaccination. It is expected other mechanisms, such as Maternity Services, will be utilised to identify these women.

7.3 These cohort files will include some people who are carers if this has been coded within their GP record. It will not include all carers who may be eligible for both vaccines. They will

also not identify household contacts of immunosuppressed individuals. The winter adult invitation letter prompts household contacts and carers to attend for appropriate vaccines.

8.0 Local Identification

8.1 The centralised searches of available data sources have made best efforts to identify the at-risk cohorts, but this will **not** be perfect, and there will be some over and under identification.

8.2 Whilst the Green Book sets out eligibility criteria, there are also the following statements -

For Covid-19 Vaccination -

The examples above are not exhaustive, and, within these groups, the prescriber should apply clinical judgment to take into account the risk of Covid-19 exacerbating any underlying disease that a patient may have, as well as the risk of serious illness from Covid-19 itself. (Green Book Chapter 14a page 21) available [here](#)

For Influenza vaccination

The list above is not exhaustive, and the medical practitioner should apply clinical judgement to take into account the risk of influenza exacerbating any underlying disease that a patient may have, as well as the risk of serious illness from influenza itself. (Green Book Chapter 19 page 16) available [here](#)

8.3 There is therefore a need to enable local identification of people who have not been identified through these central searches or for whom a clinician feels their condition warrants vaccination. NHS Boards have been previously supplied with a referral form for use by local clinicians (Appendix 3) to refer people who are eligible and who may not have otherwise been called. Boards should utilise their local processes to ensure appointments are made for those referred who are eligible. Boards should ensure that key partners including Health and Social Care Partnerships are aware the of process for local identification and, where appropriate, provide access to the referral form. The clinicians referring should ensure accurate coding is applied for future cohort creations for eligible people.

8.4 In particular, the groups that may have been missed from central identification include -

- Some people considered to be severely immunosuppressed (SIS), may not have been identified, particularly those who are about to, or recently started receiving Chemotherapy or Radiotherapy.
- Some prescribing data is accessed from secondary care, through searches of HEPMA and Home Care databases, however this data is incomplete across Scotland and there may be some people who have not been identified who are prescribed immunosuppressant type medications.
- Children and young people aged 5-16 years who have recently started chemotherapy will **not** be included in the file as they are not routinely added to the

Chemocare database. NHS Boards need to engage with local/regional centres to identify these patients.

- Not all people living with HIV will be identified through the GP IT searches, for example if the person is not registered with a GP, therefore local referral from clinicians will be necessary. All HIV clinicians have previously been made aware of this, but Boards may wish to contact these colleagues so that they are aware of who to contact to make such referrals.

8.5 Contact from People Seeking Vaccination who have not been identified.

8.5.1 Citizens who deem themselves in the at-risk group, but who have not been identified may contact the National Contact Centre (NCC). The following process via a script will be in place for NCC call handlers to follow:

- The caller will be asked if they have received a letter. NCC have an approved list of at-risk condition eligibility which reflects the information on NHS Inform. NCC will appoint the caller and will advise them that the vaccinator on the day of the appointment may ask some further questions to confirm eligibility.

8.5.2 Vaccinators or staff at clinics may receive contact from citizens who deem themselves in the at-risk group and who are therefore eligible for flu and / or Covid-19 vaccination, but who have not been included in the cohort files and have not been locally identified. It is not expected that vaccinators engage in difficult or awkward conversations, but vaccinators must be satisfied/should ensure that they are comfortable that the person meets any of the Green Book and Patient Group Direction definitions of “at risk”. If the individual does not meet the criteria, they should not be vaccinated and instead be directed to their GP or Clinician to go through the local clinical referral route.

9.0. Cohort Refresh Details

9.1 The at-risk cohorts for winter 2023 will be refreshed in circa November 2023 – date to be confirmed.

Appendix 1

Notes on Clinical Criteria for identification of 'at-risk' for Covid19 and Flu Vaccination

Clinical Risk Group	Description	Inclusions				Notes
		Flu	Covid	Child Covid	nMABs	
Asthma Admission	Asthma admission codes	y	y	y	n	All individuals eligible for nMABs are being added to the Flu and Covid Cohorts. nMABs is only for those age 12+ so younger children may not be identified (e.g. receiving chemotherapy) For Flu is admission 'ever'. For Covid-19 is admission in last 2 years. Augmented by hospital SMR searches For Flu requires a diagnosis code and a prescription since 01/09/2021 of inhaled steroids or oral asthma medication. For Covid requires a diagnosis codes and any asthma inhaled or oral prescription in the last year AND 2 or more prescriptions for oral prednisolone in the last 2 years.
Asthma Diagnosis	Asthma Diagnosis codes	y	y	y	n	
Asthma Medication Read codes	Asthma medication Read codes (not prescription codes)	y	n	n	n	
Respiratory	includes COPD, bronchiectasis, cystic fibrosis, bronchopulmonary dysplasia, pneumoconiosis	y	y	y	n	
Cardio -Vascular Disease	CHD, Included IHD, congenital heart disorders, Heart failure, hypertension with heart complications. Infections with heart complications, PVD, valve disorders, pacemakers, arrhythmias	y	y	y	n	
Thrombo-embolic Disease	Thrombo-Embolic Disease- Venous and Arterial	y	y	n	n	
Chronic Kidney Disease (CKD)	Wider diagnostic renal disease codes that would be comparable to level of 3-5 disease, chronic kidney failure, nephrotic syndrome, kidney transplantation.	y	y	y	partial	Subset for nMABs to indicate CKD 4-5
CKD1-5	CKD Stage 1-5	y	y	y	y	
CKD3-5	CKD Stage 3-5	y	y	y	n	
Chronic Liver Disease	Chronic Liver Disease, cirrhosis, biliary atresia, chronic hepatitis.	y	y	y	n	Augmented by coding from SMR hospital data
Diabetes Mellitus	All types of Diabetes Mellitus irrespective of treatments.	y	y	y	n	
Gestational Diabetes		y	y	n	n	
Diabetes Resolved		y	y	y	n	Removes individual if dated after the most recent Diabetes or Gestational Diabetes code
Addison's Disease and hypopituitary conditions		y	y	y	n	

Appendix 1 Continued

Gastro-oesophageal Reflux Disease		n	n	y (not 6m- 4yr olds)	n	If diagnosed in last 3 years
Inflammatory Bowel Disease		n	n	y	n	
Chronic Neurological Diseases	Chronic Neurological Diseases. Includes Stroke	y	y	n	n	
Child Chronic Neurological Diseases	A subset of the Adult Neurological Disease codeset, excluding codes for conditions that can only occur in adults. Includes also Huntington's Chorea, Multiple Sclerosis, Motor Neurone Disease that are criteria for nMABs	n	n	y	n	
Epilepsy		n	y	y	n	
Epilepsy Resolved		n	y	y	n	Removes individual if dated after the most recent Epilepsy code
Learning Disabilities	Learning Disabilities (all severity).	y	y	y	n	
Autism		n	n	y	n	
Down's Syndrome		y	y	y	y	Only search to age 18 otherwise use SMR / other data sources
Immunosuppression	Immunosuppression diagnosis codes including haematological cancers, HIV, Autoimmune diseases. Also Immunosuppressant medications codeset. Several subsets are used in criteria for nMABs / anti-viral treatments.	y	y	y	partial	Augmented by coding from hospital data, Chemocare and HEPMA / Homecare prescriptions.
Metastatic Cancer		n	see note		y	Not included in the codesets for Flu or Covid, but is in nMABs cohort so will be added to the cohorts for both vaccinations.
Splenic Disorders	Splenic disorders, absent spleen, includes Sickle cell, Thallassaemia	y	y	y	partial	Sickle Cell and Thallassaemia are included for nMABs

Appendix 1 Continued

Coeliac Disease	Coeliac Disease	y	y	y	n	
Severe Obesity	Severe Obesity - Adult coding + for values >40	y	y	n	n	
Carer		y	y	n	n	
Not a Carer		y	y	n	n	Removes individual if dated after the most recent Carer code.

Appendix 2 Covid-19 treatments (nMAB/Antiviral cohort)

All people who are eligible for nMABs / antiviral treatments should they contract Covid-19 infection, are considered at high risk and are therefore eligible for both Flu and Covid-19 vaccinations as preventative measures. This table describes the data sources and clinical groupings used to identify this cohort. Note – this forms only a subset of the total at-risk cohorts for Flu and Covid-19 vaccinations.

Condition	Source	Criteria
Down's Syndrome	GP Systems, Shielding, NHS Board local identifications.	Coding in Down's Syndrome in children aged 12-18. Use of existing 'at risk' list for adults with Down's Syndrome, from December 2020.
Sickle Cell Disease	GP Systems, NHS Board local identifications.	No time limiting parameters.
Solid Cancer	GP Systems, Chemocare, Radiotherapy Centres, NHS Board local identifications.	Metastatic / secondary cancer codes (no time limits). Lung cancer. People who are on the Chemocare list, treated in the last 12 months. Radiotherapy, treated in the last 12 months where possible with the exception of any patients who received radiotherapy for benign disease (e.g. benign brain lesions, benign thyroid cancer).
Haematological Malignancy	GP Systems, Chemocare, NHS Board local identifications.	Diagnosis of B-cell lymphoproliferative disorders (no time limitations). Patients receiving treatment prescribed through Chemocare for Haematology from the 01/01/2014 to date.
Immune Mediated Inflammatory Disorders	GP System, Homecare, Hospital Electronic Prescribing and Medicines Administration (HEPMA), NHS Board local identifications.	No disease diagnosis coding searched for. Identification based on medications. Prescription of cyclophosphamide, tacrolimus, cyclosporin, or mycophenolate in the last 6 months. Prescription of a steroid (other than prednisolone) in the last 6 months. (Prednisolone excluded as high probability used for conditions other than IMID) Recording of specific Biologics in the last 6 months. Recording of B cell depleting therapies in the last 12 months.
Primary Immune Deficiencies	GP Systems, NHS Board local identifications.	Diagnoses of Common variable deficiencies, Hyper IgM syndromes, Good's syndrome, Severe Combined Immunodeficiency (SCID), APECED syndrome, Primary immunodeficiency Primary agammaglobulinaemias. All with no time limits.
HIV/AIDS	NHS Board local identifications.	Locally identified by clinicians.

Renal Disease	GP Systems, NHS Board local identifications.	Latest CKD recording as CKD 4/5 or a diagnosis code indicating renal failure or on dialysis.
Liver Disease	Scottish Hospital Records (SMR01), NHS Board local identifications.	Diagnoses of Chronic Liver Disease ~ (including cirrhosis and failure and carcinoma) since 1996 records indicating decompensated liver disease) including oesophageal varices with bleeding, hepatorenal syndrome) in last 24 months.
Transplants	GP Systems, NHS Blood & Transplant, Scottish Hospital Records (SMR01).	Stem Cell transplant in the last year. All types. Records of Solid Organ Transplants, includes Kidney, Pancreas, Islets, Heart, Lung, Liver, Intestinal (Excludes Corneal transplants), no time limit.
Rare Neurological Conditions	GP Systems, NHS Board local identifications.	Huntington's Chorea, Myaesthesia Gravis , Multiple Sclerosis Motor Neurone Disease (All no time limit).
Aplastic Anaemia	GP Systems.	No Time Limit
Thalassaemia	GP Systems.	No Time Limit

Appendix 3

REFERRAL for COVID-19 VACCINATION for Winter Booster 2023 /24 At-Risk Cohort

This form has been developed for local clinician referral for any people eligible in the above cohort for the Winter booster vaccination, but who may not be identified via the national interrogation of IT systems and databases particularly those who are recently diagnosed.

Date of Referral:			
Referring Clinician Name:		Email:	
Responsible Consultant/GP:		Specialty:	
Referring Hospital/ GP Practice:			
Patient Name:			
CHI:			
Telephone Number:			
Reason for Booster referral:			
<ul style="list-style-type: none"> Awaiting Transplant: Commencing Immunosuppressive Therapy: High risk Haematology patients Other <p style="margin-top: 20px;">NB people aged 12-16 who are being treated with chemotherapy will not be included in the national cohort file</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <hr style="width: 50%; margin-left: auto; margin-right: auto;"/>		
Any other comments:			
<p>Please note that the referral for vaccination should be sent to the Health Board of the patient's residence rather than where the person is attending for clinical care</p>			

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