Shielding Group Patients – Guidance Notes (Pen Y Bont)

The guidance on shielding is incomplete and changes day by day. These notes reflect our current understanding / information sources. All links checked 15.4.20 and are to the specific guidance page not the main homepage. There’s some [RCGP eLearning on shielding](https://elearning.rcgp.org.uk/course/view.php?id=377).

**Basic Principles**

* 3 groups – (1) highest risk/most vulnerable – strict shielding group (2) high risk - roughly = ‘flu jab’ group (3) everyone else.
* Strict shielding is a huge ask of patients (it’s extremely restrictive both now and for long after ‘normality’ returns for others) and a big ask of the wider community (who need to deliver the practicalities that shielding means)… but it’s crucial for those at highest risk.
* Shielding <https://gov.wales/guidance-on-shielding-and-protecting-people-defined-on-medical-grounds-as-extremely-vulnerable-from-coronavirus-covid-19-html>

**Who is in the shielding group?** Currently it’s 8 patient groups:

1. Solid organ transplant recipients
2. People with specific cancers :
	1. People with cancer who are undergoing active chemotherapy or radical radiotherapy for lung cancer
	2. People with cancers of the blood or bone marrow such as leukaemia, lymphoma or myeloma who are at any stage of treatment
	3. People having immunotherapy or other continuing antibody treatments for cancer
	4. People having other targeted cancer treatments which can affect the immune system, such as protein kinase inhibitors or PARP inhibitors
	5. People who have had bone marrow or stem cell transplants in the last 6 months, or who are still taking immunosuppression drugs
3. People with severe respiratory conditions including all cystic fibrosis, severe asthma and severe Chronic Obstructive Pulmonary Disease (COPD)
4. People with severe single organ disease (e.g. Liver, Cardio, Renal, Neurological).
5. People with rare diseases and inborn errors of metabolism that significantly increase the risk of infections (such as Severe Combined Immunodeficiency (SCID), homozygous sickle cell).
6. People on immunosuppression therapies sufficient to significantly increase risk of infection.
7. Pregnant women with significant heart disease, congenital or acquired.
8. Children up to the age of 18 with significant heart disease, congenital or acquired.

And for most of our patients it’s obvious – they’re either clearly in those groups or clearly not. The harder groups are 3 (severe asthma / COPD), 4 (severe single organ disease) and 6 (immunosuppression) and that’s primarily where these notes focus. Disease or condition specific guidance is below.

**Severe Asthma**[Asthma UK](https://www.asthma.org.uk/advice/triggers/coronavirus-covid-19/shielding-advice-high-risk/) say shield if **ALL THREE** of (1) asthma **and** (2) “continuous or frequent oral steroids” **and** (3) triple therapy i.e. reliever + preventer + controller (montelukast, salmeterol or formoterol) or a combination inhaler like Seretide, Fostair, Symbicort, Flutiform, Fobumix, DuoResp Spiromax, Combisal, Sereflo, Sirdupla, Aloflute, AirFluSal, Relvar Ellipta, Fusacomb or Stalpex) and that matches the [NHS Digital](https://digital.nhs.uk/coronavirus/shielded-patient-list/methodology/rule-logic) / CMO definition.

The [British Thoracic Society (BTS)](https://www.brit-thoracic.org.uk/about-us/covid-19-identifying-patients-for-shielding/) add “severe asthma on biologics” – the “…mabs” – Omalizumab (Xolair), Mepolizumab (Nucala), Reslizumab (Cinqaero) and Benralizumab (Fasenra) ([Asthma UK website](https://www.asthma.org.uk/advice/severe-asthma/treating-severe-asthma/xolair-and-new-treatments/)).

What are “frequent oral steroids” – hard to find a robust definition but [NHS Digital](https://digital.nhs.uk/coronavirus/shielded-patient-list/methodology/rule-logic) used “four or more prescriptions for prednisolone over the six months” prior to 19.3.20. Our working definition is “oral steroid for >3 months or more than 3 or 4 short courses per year” and in the section on immunosuppression below we’ve used the British Rheumatology Society [covid-19 risk scoring guide](https://www.rheumatology.org.uk/Portals/0/Documents/COVID19_risk_scoring_guide.pdf) which, for steroids, would seem entirely reasonable definitions.

**Severe COPD**For shielding, NHS Digital used “those patients who are prescribed “triple therapy” inhalers and/or roflumilast”i.e. LAMA + LABA + ICS (either as combination e.g. Trimbow or Trelegy or as individual inhalers). There’s a really useful table at [PCRS](https://www.pcrs-uk.org/sites/pcrs-uk.org/files/RespInhalerTable_FINAL_0.pdf).

[GOLD](https://goldcopd.org/wp-content/uploads/2019/12/GOLD-2020-FINAL-ver1.2-03Dec19_WMV.pdf) 2020 (p27) uses the standard (post bronchodilator FEV1/FVC < 0.7) definition with “severe” being a post bronchodilator FEV1 of < 50% predicted.

If we have them, a modified MRC dyspnoea score, CAT score and exacerbation history may be useful ([GOLD ABCD](https://goldcopd.org/wp-content/uploads/2020/03/GOLD-2020-POCKET-GUIDE-ver1.0_FINAL-WMV.pdf) p9 & 11) generally but for quick decision making – FeV1 < 50% predicted or triple therapy is a good rule of thumb.

**Other Chronic Lung Diseases**

* Interstitial lung disease / pulmonary fibrosis à shield (should have had letters - [Action on Pulmonary Fibrosis](https://www.actionpulmonaryfibrosis.org/protecting-yourself/) and [BTS](https://www.brit-thoracic.org.uk/about-us/covid-19-identifying-patients-for-shielding/))
* **Active** Pulmonary Sarcoidosis à shield ([Sarcoidosis UK](https://www.sarcoidosisuk.org/information-hub/coronavirus-faq/) and [BTS](https://www.brit-thoracic.org.uk/about-us/covid-19-identifying-patients-for-shielding/)). For remission and other sites, see Sarcoidosis section below
* Cystic Fibrosis à shield
* Bronchiectasis – depends. [BTS](https://www.brit-thoracic.org.uk/about-us/covid-19-identifying-patients-for-shielding/) suggest those with (1) prophylactic antibiotics e.g. inhaled antibiotics or azithromycin x3/week (2) chronic pseudomonas infection (3) 3 or more exacerbations/year (4) severe airflow obstruction (see COPD above) or significant breathlessness i.e. [MRC 3-5](https://www.pcrs-uk.org/mrc-dyspnoea-scale) à shield
* Long term ventilation à shield
* CPAP users (sleep apnoea) à social distancing ([useful BTS/OSA joint statement](https://www.brit-thoracic.org.uk/media/455098/osa-alliance-cpap-covid-19-advice-20-3-20-v10.pdf))
* Pulmonary Hypertension à shield

**Heart Disease**

The [British Heart Foundation (BHF)](https://www.bhf.org.uk/informationsupport/heart-matters-magazine/news/coronavirus-and-your-health) say shield if (1) heart transplant or (2) pregnant + symptomatic IHD or HCM (if affecting function) or LVH (2y to ↑BP) or PAH or a moderate/severe leaking or stenosed valve or LV dysfunction or significant congenital heart disease).

For all other patients with heart disease – social distancing / avoid non essential risk. More so with symptomatic IHD or valvular heart disease, or cardiomyopathy.

Heart failure à social distancing / avoid non essential risk. No guidance found to suggest greater risk at specific ejection fraction levels.

Basically – unless heart transplant or pregnancy, severity of symptoms should guide level of caution but social distancing rather than formal shielding.

**Severe Single Organ Disease**

Kidney - [Kidney Care UK](https://www.kidneycareuk.org/news-and-campaigns/coronavirus-advice/) say shield if (1) transplant and are immunosuppressed or (2) on dialysis (but in Wales only if ITU admission within last 3y) or (3) inflammatory (autoimmune) renal disease and on specific drugs (see link for list) – vasculitis, SLE, Goodpasture’s etc

Liver - [British Liver Trust](https://britishlivertrust.org.uk/coronavirus-covid-19-health-advice-for-people-with-liver-disease-and-liver-transplant-patients/) say shield if (1) transplant or (2) autoimmune hepatitis (3) undergoing active chemotherapy, immunotherapy or antibody treatment – should all have been identified / had letter from hospital teams.

**Sarcoidosis**

[Sarcoidosis UK](https://www.sarcoidosisuk.org/information-hub/coronavirus-faq/) say “If you have active pulmonary sarcoidosis, cardiac sarcoidosis or neurosarcoidosis then you should be shielding. If you have another form of sarcoidosis (for instance affecting your skin, eyes, bones, liver or kidneys) and you are taking medication for your sarcoidosis, you should also follow shielding measures. If you have another form of sarcoidosis and you are not taking medication for your sarcoidosis, then you are not required to follow shielding measures.”

Remission – will depend on site and severity (and last flare may have been 20+ years ago) – social distancing and extreme care recommended but active shielding no (unless definite heart/lung damage).

**Neurological Conditions**

The [Association of British Neurologists (ABN)](https://www.theabn.org/page/covid19_response) has an excellent guide (9.4.20) covering a number of neurological conditions. The concerns are generally as expected from the CMO list – those with an impaired immune response and those with impaired respiratory function.

[**Parkinson's UK**](https://www.parkinsons.org.uk/news/understanding-coronavirus-and-parkinsons) **– “**While the government has said people with Parkinson's have an increased risk of complications if they get coronavirus, having Parkinson’s itself does not put you in the extremely vulnerable group. The advice for people with Parkinson’s is the same for most other people, to **stay at home**.**”**

**The** [**MS Society**](https://www.mssociety.org.uk/care-and-support/ms-and-coronavirus-care-and-support) **– “**You're considered to be **extremely vulnerable** or high risk if you: you have significant difficulties with breathing or swallowing (for instance if you need artificial feeding), have taken alemtuzumab (Lemtrada) or cladribine (Mavenclad) within the last 12 weeks, have had HSCT treatment in the last 12 months. If you're self-isolating because of a recent course of alemtuzumab or cladribine, you generally will only need to self-isolate up to 12 weeks from the date of your course. So for example if you had an infusion of alemtuzumab 8 weeks ago, you should self-isolate for another 4 weeks. If you are self-isolating because of HSCT, you should discuss the period of time with your transplant team as they may recommend longer.**”**

The [**Motor Neurone Disease Association**](https://www.mndassociation.org/shielding-and-protecting-vulnerable-persons-from-covid-19/)sayshield as“severe respiratory disease” – we’d agree under category 4 (severe neurological disease).

[Muscular Dystrophy UK](https://www.musculardystrophyuk.org/get-the-right-care-and-support/coronavirus-information-and-advice-for-people-with-muscle-wasting-conditions/) - say no current recommendation to shield but they are seeking to change that. If clear evidence respiratory function compromise / other risk factors there may be an argument for some patients. [Action Duchenne](https://www.actionduchenne.org/coronavirus-covid-19-advice/) reference the ABN page above.

**Rheumatological Conditions & Immunosuppression Generally**

Regarding shielding decisions, probably the clearest guidance is British Rheumatology Society [covid-19 risk scoring guide](https://www.rheumatology.org.uk/Portals/0/Documents/COVID19_risk_scoring_guide.pdf) and there’s an patient version at [Versus Arthritis](https://www.versusarthritis.org/covid-19-updates/covid-19-assessing-your-risk/) (adults) and BSR / Great Ormond Street [Guide for Parents & Children](https://www.versusarthritis.org/media/22314/guide-to-shielding-and-social-distancing-for-children-a-tool-for-parents.pdf) flowchart which is very clear.

Looking at other condition sites, the definitions and doses look very similar so using this risk score as our guide for all immunosuppression / shielding would be sensible.

Not directly on shielding but worth mentioning - [Management of Rheumatology Patients during the coronavirus pandemic](https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/03/clinical-guide-rheumatology-patients-v2-08-april-2020.pdf) (8.4.20) is useful and NICE [NG167](https://www.nice.org.uk/guidance/NG167) (3.4.20) covers “rheumatological autoimmune, inflammatory and metabolic bone disorders” and reminds that “patients having immunosuppressant treatments may have atypical presentations of COVID‑19. For example, patients taking prednisolone may not develop a fever, and those taking interleukin‑6 inhibitors may not develop a rise in C‑reactive protein.” It says to continue denosumab but to delay zolendronic acid for six months.

[NHS England Specialty Guides](https://www.england.nhs.uk/coronavirus/secondary-care/other-resources/specialty-guides/) is useful re a range of conditions and on the [page on steroid use with MSK conditions](https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/03/CO0043_Specialty-guide-and-coronavirus_-MSK-corcosteroid_-v1-25March.pdf) and regarding steroid injections they say “triamcinolone acetonide 40mg is equivalent to 10 times normal daily physiological steroid production. Injected steroids have been shown to cause a variable degree of adrenal suppression for at least some weeks” and we know that systemic steroids aren’t recommended during active covid-19 infection.