RESPIRATORY CONDITIONS NEEDING SHIELDING

- Cystic fibrosis
- severe asthma (see below)
- severe COPD (see below)
- lung cancer and mesothelioma, who are having active chemotherapy or radical radiotherapy
- severe bronchiectasis
- interstitial lung disease, including pulmonary fibrosis and sarcoidosis

People are also extremely vulnerable if they have multiple long-term health problems. This group will include people with any long-term lung condition which they are treated for (including asthma, COPD, lung cancer, bronchiectasis, pulmonary fibrosis and others who are offered an annual flu jab) who also have diabetes or heart disease.

ASTHMA -any of below-

- Any <u>biologic therapy</u> /Steroid tablets or liquid every day/On regular prophylactic antibiotic for asthma /Tiotropium inhaler/A combination inhaler that also contains a long-acting bronchodilator (e.g. Seretide, Fostair, Symbicort) at a high daily steroid dose /An inhaler with a high daily steroid dose and taking Montelukast
- Or, if: admitted to hospital for asthma in the last 12 months or ever been admitted to an
 intensive care unit for asthma

COPD -any of the below-

 severe or very severe airflow obstruction on spirometry/on regular steroid tablets/MRC score 3 or more/on LTOT or NIV at home/past hosp admission for COPD exacerbation/2 or more exacerbations in past 1 year needing antibiotics or steroids from GP or hospital.

Severe bronchiectasis

- meet any of the criteria that are on the list under COPD
- on nebulized treatments

Interstitial lung disease, including pulmonary fibrosis and sarcoidosis

- MRC breathlessness score of 3, 4 or 5.
- Past hospital admission because of an acute attack of the lung condition
- 2 or more exacerbations or flare-ups in the past year that need emergency treatment with steroids or antibiotics from the GP or hospital
- are on regular steroid tablets
- have oxygen therapy at home
- has low lung function this is defined as an FVC (size of the lungs) of less than 80% or a TLco (gas transfer) of less than 60% -
- with pulmonary hypertension,
- takes the following treatments:
 - Prednisolone/Methotrexate/Azathioprine/Mycophenolate/Cyclosporin/
 - Sirolimus/Tacrolimus
- have in the last 6 months has received i.v. Cyclophosphamide, Rituximab or Infliximab
- live with IPF and take Pirfenidone or Nintedanib

CARDIAC CONDITIONS NEEDING SHIELDING

- Heart Transplant
- Pregnant and have significant heart disease defined by experts as any of the following:
 coronary heart disease, hypertrophic cardiomyopathy, LVH caused by high BP,
 pulmonary arterial hypertension, a narrowed or leaking heart valve if this is moderate or
 severe, heart failure that affects left ventricular function, significant congenital heart
 disease.
- People with congenital heart disease who are at particularly high risk of becoming seriously ill from Covid-19 coronavirus include those with any of the below:
 - > 70/have complex congenital heart disease (such as single ventricle, cyanosis or Fontan circulation including total cavopulmonary connection)/have lung disease or other medical problems such as diabetes or kidney disease/have pulmonary hypertension /have heart failure which causes symptoms such as breathlessness or requires medication/are immunosuppressed, including those who don't have a spleen that works normally i.e. those on prophylaxis low dose penicillin on repeat scripts

CARDIAC RISK GROUPS BUT NOT NEEDING SHEILDING

- Heart disease and you're over 70
- Heart disease and lung disease or chronic kidney disease
- Angina that restricts daily life or using GTN frequently
- Heart failure, especially if it restricts daily life or admission in last 1 year for H failure
- Heart valve disease that is severe and associated with symptoms despite medications. A
 heart murmur that does not cause you symptoms doesn't put you at high risk.
- Recent open-heart surgery in the last three months (including heart bypass surgery)
- Cardiomyopathy
- Congenital heart disease (any type) if you also have any of the following: lung disease, pulmonary hypertension, heart failure, you're over 70, you are pregnant, or if you have complex congenital heart disease.

If in one of these groups, the advice is the same as for everyone in the UK (except for the extremely vulnerable, who have to be even more careful to protect themselves): stay at home apart from essential needs.

If doesn't fall into one of the groups above, having a heart condition or any of these issues means high risk - again, should stay at home, apart from essential needs:

- Coronary heart disease, such as a past heart attack, stent, or bypass surgery (at any time)
- Over 70 years old
- High blood pressure (hypertension)
- Pregnancy
- Diabetes
- Lung disease, including asthma
- Chronic kidney disease
- Stroke
- Vascular dementia or small vessel disease in the brain

- Body mass index
- Smoking

In Brugada syndrome or Long QT syndrome -if they get covid19 symptoms, may need serial ECG monitoring .

Atrial fibrillation- There isn't enough information at the moment to tell whether it or other abnormal heart rhythm problems put patient at higher risk from coronavirus. It seems likely if well controlled atrial fibrillation, risk is lower than for the groups mentioned above.

Pacemaker, whether or not this raises risk from complications depends on the reason why the pacemaker was inserted.

RENAL CONDITIONS

(other than transplants; Autoimmune renal conditions on immunosuppressants/ steroids; nephrotic syndrome -all need shielding and should have letter from secondary care)

CKD3-5 - Social distancing advice

Anyone who has CKD stage 3-5 has been defined at being at increased risk of severe illness from coronavirus and therefore should, take social distancing measures (or social isolation/shielding if advised to do so). The later stage of CKD, greater the risk.

<u>Dialysis- do the new guidelines regarding self-isolation/shielding affect? Advice as follows-</u>

If you are on dialysis you are at a high risk of having serious illness from COVID-19 and you should continue to stringently follow the government's social distancing guidelines and restrictions on movement. You may well have received a text from the NHS to advise you to self-isolate but do not wait for the text or letter to do so. Of course, you should continue to go to dialysis. We understand there has been some confusion as to whether or not dialysis patients should be shielding/self-isolating or not and we are seeking clarification on this

ENDOCRINE CONDITIONS

<u>Diabetes</u> -with HBa1c >75, recent DKA or poor medication adherence.

Addison disease-shielding not needed.

On the basis of current data, there is no evidence that patients with adrenal insufficiency are at increased risk of contracting COVID-19. However, we know that patients with Addison's disease (primary adrenal insufficiency) and congenital adrenal hyperplasia have a slightly increased overall risk of catching infections. In addition, patients with adrenal insufficiency would require additional measures when severely unwell (hydrocortisone injection and infusion) to avoid an adrenal crisis.

NEUROLOGICAL CONDITIONS

- Patients with conditions that do not affect their swallowing or breathing muscles and in whom the immune system is working normally are not considered to be at increased risk from COVID-19.
- Milder or moderate forms of many of the commoner neurological disorders, such as
 Parkinson's disease, multiple sclerosis, epilepsy are not currently considered to confer
 increased risk, so long as the breathing and swallowing muscles are functioning well and
 not on immunotherapies or high prednisolone dosage >20 mg kg/day.
- Intravenous immunoglobulin probably does not increase risk. Patients must not suddenly stop prednisolone and may actually require higher doses during infection.
 Patients can continue hydroxychloroquine and sulfasalazine if they are infected with COVID-19. If a patient is infected with COVID-19, they should temporarily stop their conventional DMARD and biological therapy, unless they have myasthenia gravis or neuromyelitis Optica (NMO) spectrum disorders
- Muscular Dystrophy/polymyositis/myopathies-High risk esp. if resp muscle involvement with FVC < 60%
- Vasculitis-risk increased if on immunosuppression or renal/cardiac/lung involvement
- GB syndrome/Polyneuropathy-risk increased if immunosuppressants/resp involvement
- Motor neuron disease -High risk

- Myasthenia (other than ocular myasthenia)-high risk
- Cerebral Palsy/complex epilepsy -Low risk
- Stroke- risk varies depending on other comorbidities
- Ataxic syndrome- high risk if bulbar involvement
- Benign Intracranial HT -low risk unless BMI > 40 which will then be high risk

HAEMATOLOGICAL CONDITIONS

Guidance awaited.

Splenectomy patients need shielding

RHEUMATOLOGY



Risk stratification of patients with autoimmune rheumatic diseases

To be used in conjunction with BSR guidance published 22 March 2020

<u>KEY</u>

Score of 3 or more: patients to shield

Score of 2: patients to self-isolate or maintain social distance at their discretion

Score of 1 or less: patients to maintain social distance

Risk factor	Score
Corticosteroid dose of ≥20mg (0.5mg/kg) prednisolone (or equivalent) per day for more than four weeks	3
Corticosteroid dose of ≥5mg prednisolone but <20mg (or equivalent) per day for more than four weeks	2
Cyclophosphamide at any dose orally or IV within last six months	3
One immunosuppressive medication*, biologic/monoclonal** or small molecule immunosuppressant***	1
Two or more immunosuppressive medication*, biologic/monoclonal** or small molecule immunosuppressant***	2
Any one or more of these: age >70, Diabetes Mellitus, pre-existing lung disease, renal impairment, history of ischaemic heart disease or hypertension	1
Hydroxychloroquine, Sulfalsalazine alone or in combination	U

^{*} Immunosuppressive medications include: Azathioprine, Leflunomide, Methotrexate, Mycophenolate (mycophenolate mofetil or mycophenolic acid), ciclosporin, Tacrolimus, Sirolimus. It does **NOT** include Hydroxychloroquine or Sulphasalazine, either alone or in combination.

V2: Published 24 March 2020

^{**} Biologic/monocolonal includes: Rituximab within last 12 months; all anti-TNF drugs (etanercept, adalimumab, infliximab, golimumab, certolizumab and biosimilar variants of all of these); Tociluzimab; Abatacept; Belimumab; Anakinra; Seukinumab; Ixekizumab; Ustekinumab; Sarilumumab; Canakinumab

^{***} Small molecules includes: all JAK inhibitors - baracitinib, tofacitinib etc

^{****} Co-morbidity includes: age >70, Diabetes Mellitus, any pre-existing lung disease, renal impairment, any history of Ischaemic Heart Disease or hypertension. Patients who have rheumatoid arthritis (RA) or CTD-related interstititial lung disease (ILD) are at additional risk and may need to be placed in the shielding category. All patients with pulmonary hypertension are placed in the shielding category.

GASTROENTEROLOGICAL CONDITIONS

Highest Risk 'Shielding'	Moderate risk 'Stringent social distancing'	Lowest risk 'Social distancing'
 IBD patients who either have a co-morbidity (respiratory, cardiac, hypertension or diabetes mellitus) and/or are ≥70 years old and* are on any therapy for IBD (per middle column) except 5ASA, budesonide, beclometasone or rectal therapies IBD patients of any age regardless of comorbidity and who meet one or more of the following criteria: on oral or intravenous prednisolone ≥20 mg per day (only while on this dose) new induction therapy with combo therapy (starting biologic within previous 6 weeks) moderate-to-severely active disease despite immunosuppression/ biologics short gut syndrome requiring nutritional support requirement for parenteral nutrition 	Patients on the following medications: Ustekinumab Vedolizumab Methotrexate Anti-TNF alpha monotherapy (infliximab, adalimumab, golimumab) Thiopurines (azathioprine, mercaptopurine, tioguanine) Calcineurin inhibitors (tacrolimus or ciclosporin) Janus kinase (JAK) inhibition (tofacitinib) Combination therapy in stable patients** Immunosuppressive/biologic trial medication	Patients on the following medications:

No specific recommendations are being made regarding IBD and pregnancy, and pregnant women with IBD are encouraged to follow the guidance available from the UK government for pregnant women in the general population.

These guidelines were formulated by the UK IBD COVID-19 working group on 20/03/2020 and were based on expert opinion and the available evidence at the time. Column headings updated 22/03/2020 to reflect latest government terminology.

^{*} i.e. at least one of (comorbidity listed above or age≥70) plus at least one therapy from the middle column

^{**} Combination therapy may increase risk over monotherapy but there is no specific evidence for this situation

Social distancing, as for everyone in the U.K.	 Medications on the following list alone or in combination: Topical skin treatments (creams, gels, etc). Hydroxychloroquine Acitretin Sofretinoin Isotretinoin Dapsone Chloroquine Suffasalazine Sulfasalazine Only inhaled or rectally administered immunosuppressant medication, e.g. steroid inhalers
Advised to shield ⁴ only if other concerns or high-risk circumstances/co-morbidities ⁵ (individual decision by clinician), (moderate risk)	 Well-controlled patients with minimal disease activity and no co-morbidities (as below) ⁵ on single agent, standard oral immunosuppressants, ¹ biologic/monoclonal² or novel small molecule immunosuppressants ³ Well-controlled patients with minimal disease activity and no co-morbidities⁵ on a single biologic (e.g. anti-TNF, IL17 agent)² plus methotrexate at a standard dose Well-controlled patients with minimal disease activity and no co-morbidities⁵ on single agent standard oral immunosuppressant¹ plus hydroxychloroquine or sulfasalazine.
Definite high risk – to be advised to shield ⁴	 Any two agents within the following classes: immunosuppressive medications (e.g. ciclosporin, azathioprine as below),¹ biologics/monoclonals (e.g. anti-TNFs, IL17 agents as below)² or novel small molecule immunosuppressants (e.g.apremilast)³ (except those exceptions in the middle column) Corticosteroid dose of ≥ 20 mg (or 0.5 mg/kg) prednisolone (or equivalent) per day for more than 4 weeks Corticosteroid dose of ≥ 5 mg prednisolone (or equivalent) per day for more than 4 weeks plus at least one other immunosuppressive medication,¹ biologic/monoclonal² or novel small molecule immunosuppressants (e.g. JAK inhibitors)³ Cyclophosphamide at any dose orally or if received IV dose within last 6 months Rituximab or infliximab when prescribed primarily for skin conditions (e.g. psoriasis or pemphigus)
Dermatology: Recommendations for shielding/social distancing	Medication acting on the immune system