

Guidance for Health Care Workers with Underlying Health Conditions

21 March 2020

Produced by Kali Perrow and Tom Evans on behalf of the Clinical Cell

In response to the COVID-19 pandemic and current evolving situation in the UK, the 4 nations administrations announced that people with underlying health conditions should practice social distancing and may soon be asked to self-isolate for up to 12 weeks. The definition of 'underlying health conditions' was based on those requiring the annual flu vaccine and by necessity was highly precautionary to ensure as many people as possible reduce their potential risk of severe COVID-19 and thus the requirement for health care support.

Many staff both with and without underlying health conditions will require time away from work if self-isolating due to symptoms of COVID-19 for 7 days or because of a 14 day quarantine if a household member is symptomatic. This depletion on the workforce will seriously impact the NHS, social care and emergency services in a short time frame. Therefore it is important that the science is followed and a clearer definition is given for workers in these sectors. Health and social care and emergency services workers thus require a more nuanced definition of underlying health conditions, both to protect their health and to ensure that key services can continue to function, protecting the health of the UK population in this pandemic.

Important Points:

- The health of health and social care and emergency service workers (HSCWEs) is paramount
- The NHS and emergency services need as many workers at work as possible during a pandemic to protect lives
- Strict infection prevention and control guidelines in a health and social care, and emergency service settings should ensure that the risk of acquiring COVID-19 disease is minimal.
- COVID-19 is a novel disease and the evidence base is limited although expanding. Many unknowns regarding the infection exist. The best evidence is available from the experience of those at the origin of the outbreak in Wuhan.
- Guidance may change as more information becomes available.
- Services need to be creative in their thinking to maintain staff in the workplace. There may be other areas that staff members with underlying conditions can be deployed to – including in social care. This is essential if we are to keep our services running.

Defining Risk factors for severe diseases

To date, the following have been defined as the highest risk factors for severe disease. HSCWEs with these conditions should be asked to work from home if possible, transferred to duties that could be undertaken at home, or asked to remain away from work (practising social distancing and/or self – isolation) until the outbreak has abated.

People in this highest risk group include:

1. Solid organ transplant recipients

2. People with specific cancers

- People with cancer who are undergoing active chemotherapy or radical radiotherapy for lung cancer
- People with cancers of the blood or bone marrow such as leukaemia, lymphoma or myeloma who are at any stage of treatment
- People having immunotherapy or other continuing antibody treatments for cancer
- People having other targeted cancer treatments which can affect the immune system, such as protein kinase inhibitors or PARP inhibitors.
- 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 (requiring regular hospital admissions) and severe COPD

4. People with rare diseases and inborn errors of metabolism that significantly increase the risk of infections (such as SCID, homozygous sickle cell)

5. People on immunosuppression therapies sufficient to significantly increase risk of infection (see Appendix 1)

6. People who are pregnant with significant congenital or asquired heart disease

Definition of Underlying Health Conditions with a raised (but not highest) risk of severe disease

HSCEWs with the following underlying conditions can continue to work as long as they practice strict hygiene measures. These HSCEWs should not be working face to face with confirmed or suspected cases of COVID-19, but should be deployed to areas where COVID-19 patients are not cared for or assessed. HSCEWs who work in a crowded environment, i.e. continual close working (within 1 m) of other staff members for prolonged periods of time (> 1 hr) should be relocated into less crowded environments as much as possible. We have highlighted exceptions where HSCEWs can work with patients with confirmed or suspected COVID-19. These guidelines are not definitive and may be varied by occupational health in individual cases.

Underlying health conditions include:

- chronic (long-term) respiratory diseases, chronic obstructive pulmonary disease (COPD), emphysema or bronchitis.
 - **Exception:** HSCEWs with stable asthma ('reliever' inhalers only) do not require any additional precautions beyond maintaining strict hygiene measures.
- chronic heart disease, such as heart failure
- chronic kidney disease stages 4 and 5
- hypertension is a clear risk factor, often together with other chronic health conditions. We propose that HSCEWs who have well controlled hypertension on one medication should not be excluded from working with suspected/proven COVID-19

- chronic liver disease requiring immunosuppressive medication or having progressed to severe fibrosis or cirrhosis.
 - **Exception:** HSCWEs with viral hepatitis without severe fibrosis do not require any additional precautions beyond maintaining strict hygiene measures
- chronic neurological conditions requiring regular treatments, such as Parkinson's disease, motor neurone disease, multiple sclerosis (MS), a learning disability or cerebral palsy.
 - **Exception:** HSCWEs with epilepsy need not be excluded from work.
 - **Exception:** HSCWEs with learning disabilities, no other comorbidity that increases the risk and able to comply with strict hygiene measures.
 - **Exception:** HSCWEs with dyslexia can work safely. HSCWEs with cerebral palsy who have Gross Motor Function Classification System Grades 1 and 2 can work safely.
- diabetes
 - Diabetes has clearly been identified as a risk factor but potential variations between Type I and type II diabetes and age are not clear. We would propose individual risk assessment for staff with diabetes is required.
- Splenic dysfunction
 - **Exception:** HSCWEs with splenic dysfunction or asplenia do not require any additional precautions beyond maintaining strict hygiene measures
- a weakened immune system as the result of conditions such as HIV and AIDS, or medicines such as steroid tablets or immunosuppressants
 - **Exception:** HSCWEs with HIV who have an undetectable viral load and CD4 > 350 do not require any additional precautions beyond maintaining strict hygiene measures
 - Immunomodulatory drugs vary widely in the degree of immunosuppression produced. We have adapted advice on immunosuppression from the Infectious Disease Society of North America that was produced for guidance on administering live vaccines. This is set out in Appendix 1. We would regard HSCWEs on drugs producing low level immunosuppression or low dose steroids as safe to work.
- being seriously overweight (a BMI of 40 or above)
 - **Exception:** HSCWEs with a BMI > 40 but no other chronic health conditions described above do not require any additional precautions beyond maintaining strict hygiene measures

Guidance for pregnant HSCWEs is being produced separately.

Appendix 1

Level of Immunosuppression

Assessing the degree of immunosuppression is difficult. The information below is for guidance only.

The infectious Diseases Society of America have defined different levels of immunosuppression:

High level of immunosuppression is receiving:

- Chemotherapy.
- Daily corticosteroid (see below).
- Biologics
- Haematopoietic stem cell transplant.

Low level of immunosuppression is receiving:

- Low dose corticosteroid (see below).
- Methotrexate < 0.4mg/kg/week.
- Azathioprine < 3mg/kg/day.
- 6-mercaptopurine < 1.5mg/kg/day.

Types of Immunosuppressant Drugs

Different Immunosuppressant drugs target different parts of the immune response and hence their effects are variable and additionally are influenced by the underlying disease state.

Prednisolone

There is no consensus as to what constitutes a low dose of steroid, but in general:

- Low dose steroid:
 - <20mg prednisolone for <14 days.
 - Alternate day treatment with short-acting steroids.
 - Topical//intraarticular/soft tissue injection of steroid .
 - Replacement treatment at physiological doses .
 - Long term low dose steroid, <10mg/day prednisolone.
- High dose steroid:
 - A dose of 20mg of prednisolone daily for > 14 days or 40mg daily for > 1 week is considered to cause significant immunosuppression.