COVID-19 Health Risks Relevant to SDAA Ltd Activities

Background *(last updated 7th December 2020)*

Coronavirus Disease 2019 (COVID-19) is caused by a new virus from the coronavirus family identified as SARS-CoV-2. Coronaviruses are a large family of viruses with some causing less severe disease, such as the common cold, and others causing more severe disease such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS).

SARS-CoV-2 is highly infective and the basic reproduction number (R_0) is somewhere in the region of 3 (i.e. on average one infected person will infect 3 people) without the introduction of measures to limit its spread.

SARS-CoV-2 is primarily transmitted between people through respiratory droplet (e.g. coughing and sneezing), airborne (aerosol) and contact (direct human to human or via contaminated surfaces) routes. Transmission risk is highest where people are in close proximity (within 2 metres). Airborne transmission can potentially occur during health procedures that generate aerosols. Airborne transmission may also occur as studies have demonstrated that viable virus can be released during exhalation, talking and coughing producing micro-droplets small enough to remain aloft in air and pose a risk of exposure at distances well beyond 2m from an infected individual, especially in poorly ventilated environments. In addition to respiratory secretions, SARS-CoV-2 has been detected in blood, faeces and urine.

COVID-19 can produce a range of symptoms of varying severity. However, asymptomatic infection is also relatively common, but the proportion of infected people not displaying symptoms has not been accurately quantified. For example, one third of SARS-CoV-2 antibody positive volunteers reported they had not experienced any COVID-19 symptoms in the REACT-2 study.

More common COVID-19 symptoms are fever, a new and continuous cough, shortness of breath, fatigue, loss of appetite, anosmia (loss of smell) and ageusia (loss of taste). Non-specific symptoms include shortness of breath, fatigue, loss of appetite, myalgia, sore throat, headache, nasal congestion, diarrhoea, nausea and vomiting.

Of people who develop symptoms, current data indicate that 40% have mild symptoms without hypoxia (problems with the level of oxygen in the blood) or pneumonia, 40% have moderate symptoms and non-severe pneumonia, 15% have significant disease including severe pneumonia, and 5% experience critical disease with life-threatening complications. Critical disease includes acute respiratory distress syndrome (ARDS), sepsis, septic shock, cardiac disease, thromboembolic events, such as pulmonary embolism and multi-organ failure.

Risk of severe disease and death is higher in people who are older, male, from deprived areas or from certain non-white ethnicities. Certain underlying health conditions, as well as obesity, increase risk in adults.

ONS data on deaths up to 20 November 2020 showed there had been 63,852 deaths registered in England and Wales involving COVID-19. Of these 35,358 (55%) were men and 28,494 (45%) female; the overall ratio of male : female deaths was 1.2:1. The vast majority (99%) of deaths were among people aged 45 years and over; i.e. 0.00% <1; 0.01% 1-14; 1.04% 15-44; 9.39% 45-64; 15.11% 65-74; 32.82% 75-84 and 41.63% ≥85. ONS data clearly indicated gender and age were risk factors for death from COVID-19.

The MRC Biostatistics Unit's (26th November 2020) estimate of the infection fatality ratio (IFR) was strongly linked to increasing age. Whilst the average IFR was around 0.52% the IFR figure ranged from <0.01% for under 25s, 0.026% for 25-44, 0.3% for 45-64, 2.1% for 65-74 and 11% for those aged 75+.

Current published scientific evidence suggests there is still no drug cure that will safely kill SARS-CoV-2. The first vaccine has recently been approved in the UK to help prevent infection. It is anticipated that further vaccines will receive regulatory approval and vaccinations will be rolled out across the UK adult population during the coming months.

To date, governments around the world have relied on good hygiene (e.g. hand washing, sanitising gels, face masks, gloves, etc) and social distancing methods to slow down the spread of the virus amongst the general community (i.e. reduce R_0 to <1). People displaying COVID-19 symptoms are asked to self-isolate, as well as those in the same household. Contact tracing (NHS Test and Trace) identifies those who have been in close contact with someone who has tested positive for COVID-19 and close contacts are also asked to self-isolate. Travellers are often obliged to self-isolate when they enter the UK.

It is widely accepted that people can be infective well before they display any symptoms of COVID-19 and that some people who have been infected by SARS-CoV-2 have remained totally asymptomatic. It is likely that a significant proportion of the disease is spread within the community by carriers who do not realise they are infected of SARS-CoV-2. The vast majority of people in the UK have not been tested for the presence of SARS-CoV-2 genetic material and have no idea about their current status. Even those who have been tested only know their status (i.e. positive or negative) at the time of their test.

Antibody tests have been developed to help identify those people who have developed specific antibodies to SARS-CoV-2. However, there is no clear evidence that all people who have tested positive for SARS-CoV-2 have generated antibodies capable of providing any form of long term immunity.

A clinical trial conducted in the UK showed Dexamethasone reduced the 28-day mortality rate for COVID-19 patients on ventilators by up to 35% and those on oxygen therapy by 20%, but offered no benefit for other hospitalised patients. Data from the Intensive Care National Audit and Research Centre published in October showed that the proportion of Covid-19 patients who died within 28 days of admission to critical care fell from 39% in the months to 31st August to 27% after 1st September. This improvement in clinical outcomes was attributed to advances in managing hospitalised Covid-19 patients (e.g. the use of Dexamethasone, greater use of non-invasive ventilation).

There is growing evidence to suggest that individuals who have suffered from both mild or severe COVID-19 can experience prolonged symptoms or develop long-term complications, often referred to as 'long COVID'. 'Long COVID' was already having a very serious impact on many people's lives and could well go on to affect hundreds of thousands in the UK. A study from King's College London found that older people, women and those with a greater number of different symptoms in the first week of their illness were more likely to develop 'long COVID' with one in 10 still unable to shake off the side effects eight weeks after infection. More recent evidence is also showing that 'long COVID' can be categorised into four different syndromes: post intensive care syndrome, post viral fatigue syndrome, permanent organ damage and long term COVID syndrome.

SDAA Ltd Membership Risk Factors

The vast majority of SDAA members are males. A third of SDAA members purchase a Concessionary membership book, suggesting they are either aged over 65 or have some form of disability (potentially linked to one of the COVID-19 risk factors). Clearly a significant proportion of the SDAA membership have risk factors (gender and age) that puts them at greater risk of developing the more severe COVID-19 symptoms requiring hospitalisation and an increased risk of death from this disease. Age was also a risk factor for suffering from 'long COVID'.

The average age of SDAA volunteers is probably higher than the general membership, which means they are potentially at an even greater risk.

In addition to the above, SDAA membership is likely to reflect the distribution of many of the other risk factors amongst the population, e.g. roughly a third of adults in England are obese (BMI>30).

Angling itself poses minimal risks of transmitting SARS-Cov-2, provided anglers remain well distanced, do not share items of equipment and travel separately to and from venues. However, the potential risk of transmitting SARS-CoV-2 via contaminated surfaces does exist at SDAA fisheries, e.g. the locks and gates that are necessary to secure the venues.

Health and Safety Responsibilities

The SDAA committee always seek to minimise the risks that our activities will create for our members, volunteers or rightful users of the land adjoining our fisheries. Therefore, the SDAA committee must minimise the risk of these people becoming infected with SARS-CoV-2 (or having accidents that would require valuable NHS A&E resources) whilst visiting SDAA waters and undertaking volunteer roles.

SDAA members must always respect the laws and guidelines laid out by the Government, including the current social distancing measures, instructions to self-isolate if infected with SARS-Cov-2 (or identified as a close contact) and any Government requirement to self-isolate if returning to the UK from a country with a high prevalence of SARS-CoV-2. The SDAA committee must also take into account any guidance given by the Angling Trust as we have chosen to be members and they provide our insurance cover. Finally, some land owners may choose to impose their own restrictions on SDAA members entering their land.

The Chairperson is ultimately responsible for H&S issues within SDAA Ltd.

Recommendations

SDAA's principle aim is to provide its members with opportunities to go fishing. A set of additional rules has been put in place to minimise the risk of members becoming infected with SARS-CoV-2 whilst fishing SDAA waters and undertaking volunteer roles. These are based around social distancing (i.e. keeping anglers well apart at all times) and good hygiene (e.g. particularly when touching surfaces that other members have touched such as locks and gates). These addition rules need to be reviewed on a regular basis to ensure they reflect changes in guidance provided by the Government and the Angling Trust, or any relevant changes in our understanding of COVID-19.

It is important that all SDAA members are aware of the existence of these additional rules (e.g. through a covering letter that is issued with every membership book, notices at our major fisheries) and that the latest version can be viewed/downloaded from the SDAA website. Significant changes to the additional rules should also be highlighted to members in a timely manner (e.g. through SDAA's social media pages).

Members who flout any rule designed to reduce the risk of spreading SARS-CoV-2 must be disciplined appropriately and in a timely manner. This will help reinforce the need for members to follow the additional rules at all times if they want to remain members of the club.

Volunteer activities such as committee activities, bailiffing and maintenance work must also ensure that social distancing and good hygiene is observed at all times. Face to face meetings will not be possible unless a suitable venue can be identified that provides >2m social distancing for all participants, or has suitable mitigation measures in place.

Assessment carried out by Richard Bell, SDAA Ltd Chairperson *(last updated 7th December 2020)*