

High connectivity situations outside the occupational/workplace context

Summary

It is important that the principles in the SAGE paper 'Managing infection risk in high contact occupations' are understood by members of the public who are not in high contact occupations, as all members of the public are likely to encounter high contact situations and places. It is also important that all members of the public are aware of these principles so that they can appreciate and help manage the risks to and from people in high contact occupations. As the previous summary was targeted principally at people in high contact occupations, this version has been created to be relevant to the wider public.

1. Raising awareness of the problem of high social connectivity

- There is evidence that some situations pose particularly high risk of infection due to high levels of social connection. Situations involving numerous social contacts carry a higher risk of spreading Covid-19, especially if the contacts are of longer duration, close proximity and/or indoors.
- Places where there is evidence of an increased risk of infection transmission include: public transport; places of worship; restaurants, shops, malls and markets; parties; cinemas and theatres¹. Other high-risk situations, where outbreaks have occurred, include: planes; large family gatherings; religious, cultural, sporting and political events; crowds; pubs and clubs; restaurants and cafes; hotels, cruise ships, hospitals and care homes. Close proximity or shared surfaces in other venues could also increase risk in places used by many different people, such as public toilets and libraries, gyms, indoor pools, saunas, hairdressers and beauty salons.
- People who work in these situations are at higher risk of infection, and need to be protected from infection by the members of the public they interact with, as well as taking extra precautions themselves.
- As risk levels reduce in the general population, it is vital that all members of the public are aware of which situations will continue to pose higher risk and why, and what actions need to be taken by everyone to reduce the risks in these situations.

2. Communicating key principles for managing higher infection risk due to social connectivity

Any situation involving large numbers of contacts with different people increases the risk of infection and transmission.

The risk is higher if there are

- *a greater number of contacts*
- *longer contacts*
- *close proximity contacts*
- *indoor contacts*
- *people are breathing hard (for example, speaking loudly, singing, exercising, dancing)*
- *people are from different social networks (e.g. different places, ages, families, teams etc.)*

In these situations everyone should pay particularly close attention to the social distancing and hygiene recommendations given for infection control. This is especially important for those who are at high risk of severe consequences of infection, such as older people or those at high risk from

infection due to health conditions¹. It is also especially important for anyone who has direct or indirect contact with people who are at high risk of infection (for example in their family, work or social network).

Wherever possible, changes to the structuring of activities and environments should be undertaken to reduce risks – for example, avoiding activities resulting in close proximity, contact or breathing hard, designing environments to support social distancing, requiring mask wearing, increasing ventilation and cleaning, and providing accessible facilities for hand hygiene. It may be possible to reduce contact between groups of people by discouraging mixing, restricting access to communal spaces or allocating spaces to particular groups at particular times with ventilation and cleaning between use.

Taking extra care to reduce infection risk will require everyone concerned to undertake additional actions as necessary to effectively control transmission, such as: handwashing at appropriate times; avoiding touching face or surfaces; cleaning all shared surfaces; changing/washing clothes; using and disposing of tissues; ventilating shared spaces; social distancing; and wearing a face covering when close to others if social distancing is not possible. The EMG paper on Transmission of SARS-CoV-2 and Mitigating Measures (04/06/2012) sets out how to select appropriate measures.

There are both spatial and temporal elements to the risk of infection and transmission, and the reduction of this risk. The risk of infection and transmission is increased if contacts occur at the same time (e.g. in a crowded place) or if the contacts occur over a period of several days (e.g. meeting different people or groups of people each day). The risk of infection and transmission is raised for up to two weeks after contact with multiple people, places or social networks. After a period of high exposure to multiple contacts or different networks (e.g. a social gathering) the risk of spreading infection to other people can be reduced by avoiding contact as far as possible for two weeks (for example, by physical distancing within the home and self-quarantining to the extent that is feasible).

3. Promoting awareness, solutions and skills to manage risks due to high social connectivity

Co-create, optimise and disseminate an extensive education campaign suitable for all target individuals and communities. All guidance developed must be extensively and iteratively tested and optimised through real-world implementation and feedback, taking particular care to consider and minimise the possible burden or anxiety that this may place on individuals and to ensure that implementing the guidance will not result in discrimination, stigmatisation, intergroup or interpersonal conflict.

Co-creation will involve working with diverse members of all target user groups and multidisciplinary experts in supporting behaviour change to develop engaging and accessible resources suitable for different user audiences, including persons of all genders, age groups, racial, ethnic and social backgrounds and different levels of health risk. The campaign should be developed, disseminated and implemented in collaboration with opinion leaders from all target communities.

The resources should identify and address concerns and barriers, suggest positive solutions, maintain social cohesion and support, and promote a shared sense of responsibility for infection control. The resources should include clear and convincing explanations, detailed guidance and effective behaviour change techniques to motivate and support people to adhere to the guidance.

¹ BAME groups are known to have higher rates of death due to COVID-19. Some of this is related to different patterns of chronic illness but there is, as yet, insufficient evidence to understand the extent to which this is due to different levels of exposure to COVID-19, different susceptibility to develop severe disease or both.

Where appropriate, there should be use of existing organisational structures and processes for implementation, for example Health and Safety regulations and enforcement processes, including risk assessments to identify, apply and monitor appropriate control measures which reduce infection spread. When risk assessments are undertaken it is important to monitor implementation and feedback to all concerned to check and reassure that infection control is being implemented effectively. Above all, action must remain in compliance with the Equality Duty in the Equality Act 2010.

Reference

¹Hayward AC, Beale S, Johnson AM *et al.* Public activities preceding the onset of acute respiratory infection syndromes in adults in England - implications for the use of social distancing to control pandemic respiratory infections. [version 1; peer review: 2 approved]. *Wellcome Open Res* 2020, 5:54. DOI: <https://doi.org/10.12688/wellcomeopenres.15795.1>