As isolation is eased and people return to work, governments may require organisations to complete risk assessments as part of the permission to resume normal service. This guide suggests how this could be achieved.

For ease of description, this guidance focuses on producing a separate risk assessment for Covid-19. It is equally valid, however, to amend existing risk assessments of activities by using the information prompted in this guide.

Risk assessment covering exposure to Covid-19 will be different from one organisation to another. Healthcare workers, retail cashiers, home delivery drivers, utility engineers and construction workers have different exposure to this risk. The purpose of this guide is therefore to pose the questions that need to be asked so that appropriate risk assessments may be created in all industries. We have not provided a recommended template for this assessment, but instead used headings that are common in most organisation’s risk assessments so that the information can be easily transferred and recorded.

Context
Before a risk assessment is undertaken, the assessor must first ask who is doing what and how, where they are doing it, why they are doing it and what they are using. Understanding the tasks or activities is vital to assess exposure and to qualify any subsequent control decisions.

Risk assessment
Hazard
The risk assessment must recognise the virus as a hazard. It should also reflect that the virus is spread in minute water droplets that are expelled from the body through sneezing, coughing, talking and breathing. The virus can be transferred to the hands and from there to surfaces. It can survive on surfaces for a period after transfer (depending on such things as the surface type, its moisture content and temperature). The risk assessment should conclude that if it is passed from one person to another, while many survive infection, some may die from the disease. It should be regarded as a high hazard.

Likelihood
Exposure
Consideration must be given to how exposed people are. There is a host of questions to consider:
- While at work how might employees meet people with the disease, how frequently and for how long?
- How do employees travel to work and does this expose them to public crowds?
- Do you know which employees have vulnerable medical conditions that make them more susceptible to the disease? How do you capture this information?
- Do you know which employees have people in their households who may have increased exposure to the disease?
- If someone in an employee’s household must isolate, what will you require your employee to do?
- Where are employees meeting people who may have the disease and does this increase exposure (e.g. in a confined space, in a well-ventilated environment or outside)?

Once the answers to these questions are understood, controls to mitigate them can be better considered and implemented.

Control
The safety hierarchy of control can serve you well in considering what can be done. Any mitigation controls devised and implemented must reduce exposure of employees and anyone else who could be infected by your employees. Control considerations must include identification of those who may have the disease, preventative measures and what to do if you find if an employee has contracted the disease. In other words, there may be elements of management systems design to think about. Decisions about what may be done must be realistic and reasonably practicable: achievable given the resources available.

Occupational safety and health professionals will be familiar with the hierarchy of risk control.

Covid-19 hierarchy of control

<table>
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<th>Most effective</th>
<th>Least effective</th>
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<tr>
<td>Elimination (not applicable)</td>
<td>PPE/RPE (masks, respirators, gloves)</td>
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<tr>
<td>Substitution (not applicable)</td>
<td>Administrative controls (training on distancing, distance markings and signage)</td>
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<tr>
<td>Engineering controls (ventilation, physical barriers)</td>
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Elimination is the best form of control. Can we eliminate the virus? Only through vaccination, so there is little that can be done by organisations. They are reliant on government response. Organisations should monitor vaccine availability and the priority of their workforce in any future vaccination programme so that arrangements can be made promptly. Physical distancing and staying at home are not forms of elimination, but an administrative control.

Next in descending order is substitution: replacing the virus for something less harmful is not possible.

Engineering controls place a physical barrier between the person and the hazard, or provide mechanical reduction of the hazard. Placing screens between people (e.g. cashier points in shops) will interrupt the flow of air from one person to another and therefore provide protection.

Providing ventilation is also an option. Recent IOSH research has shown that downward ventilation onto a patient’s bed considerably reduces the exposure of healthcare workers to infected droplets suspended in the air. Care must be taken if ventilation is to be considered. The fundamental question is where the potentially infected water droplets are ventilated to. It’s no good if they are blown onto other people or surfaces and increase exposure elsewhere. But as a principle it is worthy of some consideration e.g. ask whether the job must be done in a workshop, or can be done outside. But then also consider exposure to ultraviolet radiation and other risk. Ventilation is a good control if it takes infected air away from people and transfers it to somewhere where the virus will not do harm.

Administrative controls provide the best options for most organisations. The risk assessment must consider how you will keep the workplace and equipment clean, adjust your working practices and ensure people are safe.

Questions and considerations about designing a safe workplace should include:
- Can you redesign the workplace to maintain physical distancing?
- Can you repurpose meeting rooms to spread employees out?
- Can you reduce space pressure by reducing the number of employees required to work in an area (e.g. a proportion remains working from home)?
- In which places do people find it difficult to avoid one another (e.g. security points, lifts, stairs, lobbies, canteens, toilets, resource rooms, hot desks)? What can you do to smooth out their use and reduce this pressure (e.g. phased shift and break times, closure)?
- Can you provide more hand washing or sterilisation facilities around the workplace?
- Have you noted the places where most people commonly touch (e.g. equipment control panels, handles, handrails, kettles, hot desk surfaces)?

Cleaning is a vital control and deserves some careful thought:
- Have you considered how you keep commonly touched surfaces sterile and how much more frequently they need to be cleaned?
- Are you using an effective strength of cleaner to kill the virus?
- Have you amended cleaning checklists to ensure all areas that need it are being frequently cleaned?
- Have you considered the impact on your cleaners or cleaning contract?
- Cleaners are being sent to places where we believe the virus may have been left on the surface, they have a different exposure compared to other employees: how will you protect them?
- As they clean the viral loading on cloths will increase, so do they have enough to be able to change frequently?
- Where and how do they dispose of contaminated cloths?

Questions and considerations about work equipment include:
- Can equipment be allocated to an individual rather than shared?
- If equipment must be shared, then how will it be cleaned between uses (e.g. phones, desks, vehicle cabs, control panels)?
- If someone falls ill with Covid-19, what deep cleaning processes will be necessary on the equipment they have been using?
- What washing/hand sterilising facilities are available to workers and how frequently should they wash their hands to reduce potential viral load and spread on equipment and in the environment?

Questions and considerations about safe systems of work include:
- Can work sequencing be reorganised to avoid employees being in close contact with others? When this cannot be avoided, can the time they are in contact be minimised or can they work facing away from one another?
- Can you transfer some risk by using suppliers to take over some aspects of your production or work?
- When employees and contractor must work together, how will you agree Covid-19 control standards? What adjustments to contractor control may be necessary?

Questions and considerations for safe people:
- Is it necessary to know if employees are harbouring the disease and are perhaps asymptomatic? If so, do you test temperature regularly during the day, or do you rely on routine antibody testing?
- What do your employees need to know about the disease and how they may contract if going to and from work, at work, or from their households? How will you pass on this knowledge?
- How do you ensure workers know what Covid-19 controls are required in their work?
Covid-19 risk assessment guidance

- Do employees know how they can reduce exposure to the virus travelling to and from work? What advice can be provided?
- What process have you got for employees to report possible infection or exposure, and what do you then require them to do?
- Advice on Covid-19 is constantly changing. How will you keep current with advice and how will you update your employees?
- What do your managers need to know to enable them to supervise effectively? How will this be communicated and how will they be held to account for meeting this requirement?
- Where temporary workers are used, how will you ensure their competence in applying Covid-19 controls? What changes are necessary to your induction programme?
- Are employees following the rules and if not, why not?
- How will you effectively screen for health considerations in new employees to avoid inadvertently employing vulnerable people in work that exposes them to the virus?
- How do you manage people with special needs?
- What provision is in place for supporting employees with increased levels of anxiety in this pandemic or have suffered personal loss as a result of it?

There is much debate about the non-medical usefulness of PPE in this pandemic. Many scientific studies are being undertaken to improve our knowledge. Far better for organisations to seek to control exposure rather than rely on PPE. Prevention is a more effective principle. While provision may reduce employee anxiety, its effectiveness in general working situations has yet to be fully proven.

All of these questions and considerations relating to the workplace, equipment, safe systems of work and people will lead to the design of good procedures and management systems that will help to reduce exposure to the virus.

Risk management

Finding answers to the questions posed in this guide will provide a list of possible controls that can be implemented. A risk assessment does not control risk. It is the actions of individuals who apply controls that mitigate risk. The risk assessment must result in a risk control action plan, making it clear who will do what and by when. The successful implementation of this plan must then be monitored.

Spending effort on developing and applying controls specific to the organisation’s circumstances is a waste of time unless performance is monitored over time. Plans need to be in place for routinely reviewing the effectiveness of the controls you devise. It is vital to ensure that these controls are maintained and even improved as our knowledge about the virus, its transmission and its control develops.

Boards of companies will also need to be kept informed of progress and performance. They are concerned about the integrity of their workforce if the organisation is to remain productive. As part of risk management, consideration must be given to what must be reported to the Board and how frequently, so performance can be measured.

A final note of caution. Do not lose sight of the normal activity safety and health risks posed by your operations. It remains important to maintain effective control of exposure to these risks too.

The last resort in the hierarchy of risk control is personal protective equipment. It is considered the weakest control because it relies on people using it correctly. It introduces many possibilities for error: being the right specification, its cleanliness, its storage, its replacement and availability. There has been much discussion about the provision of PPE in the media, but this is focused on the medical care environment, not in normal workplaces.

Considerations include:
- If gloves are provided, the virus can still be transferred to the surface. If the wearer then touches their face, they could contract the disease. Perhaps frequent hand washing or sterilisation is a better option.
- The wearing of a paper face mask may reduce the virus being spread from the wearer to others, but its effectiveness of protecting the wearer is debatable. In any case the longer it is worn, the greater the potential viral loading on its surface. Touching the mask and then the face may increase exposure if masks are not changed regularly. If they are taken off and left lying around, potentially this increases exposure to others who may come into contact with it, e.g. cleaners.
- Plastic aprons will provide some protection for clothing, but rarely cover the sleeves which may come into contact the face too.