



Risk Engineering Services

Cleaning and disinfection during COVID-19

Loss prevention measures for reopening public spaces



Reducing the risk of exposure to the COVID-19 virus by cleaning and disinfection is an important part of reopening public spaces that will require careful planning. It is important that COVID-19 infection prevention measures announced by National Health Agencies are implemented and followed.

Most employers have considered the impact of increased cleaning requirements on their workforce, however, some may not have considered the elevated risks to their clientele. Increased frequency of cleaning and new disinfection methods could also result in wear and tear to products, property and machinery.

The risks of proper cleaning and disinfection procedures not being followed are multifaceted. The implications can be financial, legal/compliance, business interruption, and reputational/brand.

Any organisation that cannot show that it is complying with government cleaning/disinfection guidance could be forced to shut down and face hefty fines. Should that organisation find their premises to be the centre of a local outbreak, the risk to the brand reputation is immeasurable.

In the rush to reopen premises, it can also be easy to forget the necessity of proper planning and documentation. It is important to look at the increased cleaning, sanitisation, and disinfection requirements necessary during this pandemic from a full risk management perspective.

The growing popularity of alternative cleaning methods such as fogging also bring new risks that need to be carefully considered.

Cleaning, sanitisation and disinfection – what's the difference?

- **Cleaning** is the removal of soiling, whether visible or invisible, from a surface.
- **Sanitising** is the reduction of pathogenic microorganism on the skin.
- **Disinfection** is the removal of most pathogenic microorganism on inert surfaces.

This report looks at the general liability risks arising from the increased cleaning, sanitisation, and disinfection requirements of the pandemic on public spaces, workplaces, businesses and schools. It also considers some generic measures to reduce these risks.

The risks of improper cleaning measures and increased cleaning frequency:

One of the main risks when it comes to cleaning, sanitisation, and disinfection of premises against the COVID-19 virus is that of rushing the process and failing to do the job properly.

Improper cleaning methods used in your premises could not only harm the reputation of your organisation.

Not only would this harm the reputation of your organisation, but your organisation could face temporary shut down as well as legal costs and fines.

However, this is not the only risk posed by improper methods and increased frequency of cleaning.

Disinfectant products approved by National Health Agencies have been proven to be effective against the COVID-19 virus, but not necessarily proven to be safe to apply on materials. Improper methods and disinfectant products, or simply increased frequency of cleaning, can have unforeseen effects on materials and cause damage to products, property, and machinery.

It is also important to store disinfectants properly and safely. Make sure to store these products in their original container together with the instructions for use and out of reach of children. Also consider the fire risk of alcohol-based disinfectants stored in your premises.

Alternative cleaning solutions bring their own risks:

The COVID-19 pandemic has vastly increased the use of alternative disinfection methods as individuals and organisations look to protect themselves. However, we would caution against turning to alternative disinfection solutions without carefully considering the risks that each method brings.

Do not use alternative disinfectant methods (e.g. UV light, Fogging, ULV ultra-low volume fogging, electrostatic application) unless it is recommended by your National Health Agency/ Environmental Protection Agency.

If you chose to use an alternative disinfection solution, then consider using an external company that specialises in your chosen method. Such methods usually require specialist staff and proper protective equipment.

If you use an external company, make sure they are qualified and accredited. You should also check the following:

- Type of training and certifications
- What chemicals are used to disinfect – do these have any health risks or can they cause damage
- General liability coverage.

Their general liability insurance coverage is important to consider as any damage that an alternative cleaning solutions practitioner causes to your property, your staff, or your clients would be covered under their insurance policy rather than yours. Do not be afraid to ask your insurer or insurance broker to look at their policy should you have any doubts.





The importance of proper planning:

Before reopening premises, it is important to follow proper risk management procedures and put together a full plan for cleaning and disinfection. Identify the threats and potential implications, document these and use them as a starting point for your plan.

Who needs to be involved in the development of a cleaning and disinfection plan depends on the type of organisation. It is important to consider the plan from a cross functional rather than a siloed approach and make sure all affected parties are consulted. Management buy-in is critical as the measures in a robust plan are likely to be costly. However, this topic is more important than ever so does not currently struggle to get attention from the C-suite.

The plan needs to have a clear scope. Consider what is its purpose, who is responsible for what, how procedures will be documented (what, when and how), how it will be monitored, and how often the plan should be reviewed.

Make sure that the plan is in line with the recommendations of your National Health Agency/Environmental Protection Agency.

Once a plan has been agreed, it is important to communicate it widely.

The cleaning and maintenance staff need to know what to do in advance, as well as receive training on why it is necessary and how to handle any new materials/equipment they need to carry out their part of the plan.

It is also important to communicate the plan with the wider staff and clientele. Customers need to know what you are doing and why you are doing it to feel comfortable and understand any role they have to play, such as hand sanitisation and wearing face masks.

When looking at communication methods, do not stick to just email or posters. Communicate the plan on a personal basis where possible, especially to those who it will impact the most, such as cleaning staff, and those who need to communicate the plan to others, such as reception and HR staff.

Communication is key to the adherence to a plan. People need to understand why they must do things. If they do not understand this, then they are far more likely to cut corners. Regular training, supervision, and testing can also help increase this understanding on an ongoing basis.

Make sure the enforcement of the plan is documented. Include what has been done when and by whom. This will both help ensure that staff stick to the plan and save any confusion leading to things being missed.

Proper documentation of the cleaning and disinfection will also help monitor the performance of your plan.

It is important to regularly monitor the plan and make any changes/updates when necessary. It is especially important to monitor the plan whenever any new guidance is issued by your local government, National Health Agency and/or Environmental Protection Agency. Usually, cleaning plans are reviewed annually, but we would suggest much more regular reviews as guidance from government bodies is constantly evolving as we learn more about the COVID-19 virus.

You may want to consider involving an experienced consultant when putting together your plan or reviewing its effectiveness. Very few organisations have the necessary experience in house with staff that are experienced in dealing with pandemics. It could be sensible to have your proposed plan(s) reviewed by an expert and there are many in most countries who offer these kinds of services.

For further recommendations on reducing risk and some elements to consider in your plan, see the below "Generic recommended measures to reduce risk".

Make sure to follow local/sector guidance:

The World Health Organisation has issued guidance on cleaning and disinfection for organisations during the COVID-19 pandemic, however their advice may deviate from the one of your local health authorities.

Every country, and sometimes regions within a country, has its own standards and regulations. There are many similarities, but the necessary documentation and approvals can differ quite considerably. Therefore, it is important to make sure your plans and procedures follow all local standards.

Multinational/multiregional organisations may find that separate local plans are needed. There are two approaches you can take to this challenge:

1. Write a general plan with a set of international minimum criteria that need to be met, then pass onto local management to adapt the plan to their local regulations.

2. Chose a highest standard country/region and then apply a plan to suit this highest standard to all. However, this is complicated to achieve as it can be hard to convince people to adhere to a standard that is higher than they are used to locally. Also, local practicalities can cause issues.

Different business sectors will also have different standards they need to adhere to. For example, the standards set for a school are likely to be quite different for that of a hospital or an industrial manufacturer. Local government and industry body websites are a good source for the guidance and standards required on an industry basis.

Penalties and enforcements, and therefore some of the risks, for non-compliance also vary across different sectors and countries. Every health agency from all countries has guidance on their website that is downloadable online.

Generic loss prevention measures to reduce risk:



The use of disinfectants in public spaces:

- Rely on trusted suppliers of disinfectants
- Use only disinfectant which is approved against the COVID-19 virus by your relevant national regulatory body
- Use the disinfectant as instructed by the manufacturer
- Do not mix different disinfectant products or “homebrew” your own disinfectant
- Follow an established plan in line with the recommendations of your National Health Agency
- Train your employees who are responsible for disinfection on the correct use/application
- Do not spray humans with aerosolised disinfectants
- Store all disinfectant products in their original container together with the instructions for use and out of reach of children
- Label diluted disinfectant cleaning solutions
- Consider the fire risk of alcohol-based disinfectants stored in your premises.



To maintain clean air, consider:

- Increasing air supply and exhaust ventilation
- Open more windows
- Ensure the safe use of heat recovery sections
- Stop using air recirculation.

And follow the recommendations of your respective national association.



Provision of hand sanitising products in public areas:

- Rely on trusted suppliers of hand sanitiser liquids
- Only provide those which are approved against the COVID-19 virus by your relevant national regulatory body
- If you provide hand sanitiser to the public/clients, use the original container provided by the manufacturer. In case of re-fill, only re-fill with the same product from the same manufacturer
- If you provide hand sanitiser to the public/clients, make sure, that it is placed well visibly, in sufficient amount and in a safe way, so that no spill or leakage may occur
- If you provide hand sanitiser for use by young children make sure the use is supervised to avoid children ingesting it.

While cleaning and disinfection is a critical part of preparedness when reopening of premises, it needs to be part of a holistic plan. Social distancing, good personal and hand hygiene, respiratory hygiene and cough etiquette is also important.

Key takeaways

When choosing methods for cleaning and disinfection during the COVID-19 pandemic, the risks faced are multifaceted. The implications can be financial, legal, business interruption, and reputational/brand.

It is also important to consider property, product, and machinery damage. However, these can be difficult to foresee as although the disinfection products used have been proven to be effective against the COVID-19 virus, many may not have not been extensively tested against property damage or health risks.

In the rush to reopen premises, it can also be easy to forget the necessity of proper planning and documentation. It is important to look at the increased cleaning, sanitisation, and

disinfection requirements necessary during this pandemic from a full risk management perspective and put a proper plan in place.

It is important to make sure this plan adheres to all local guidance and regulations. For multinational companies it may be necessary to have multiple plans in place with one for each premises.

The growing popularity of alternative cleaning methods such as fogging also bring new risks that need to be carefully considered. If you chose to use these methods, you should make sure to employ an accredited specialist contractor with adequate general liability insurance cover in place.

Supplemental information

	Disinfectant	Hand sanitisers (hand antiseptics)
Definition	Disinfectants are chemical agents or physical methods designed to inactivate or destroy microorganisms on inert surfaces.	Antiseptics are chemical agents designed to inactivate or destroy microorganisms on living tissue/skin.
Regulation /Approval	Usually: National Environmental Protection Agency (or similar).	Usually: National Health Agency.
Inherent dangers	Toxic substances, carcinogenic substances, corrosive, easily flammable, irritant to skin, eye and respiratory organs.	Toxic substances, allergy causing substances, easily flammable.
Specific risks	Bodily injury risks if used out of scope and instructions (e.g. aerolised use indoors or on people), use of non-approved products, mixing of products, fire risk.	Bodily injury if used out of scope and instructions (toxic if ingested, asthma, lung injuries if aerolised). Bodily injuries even if used in scope (allergies, mucous membrane irritation, burns).



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