

ISSA
Tip Sheet



RISK ASSESSMENT

for Cleaning and Disinfection Work

What is risk assessment?

A “Risk Assessment” is a process that identifies risks associated with hazards that have the potential to cause harm. Assessing these risks will help in determining ways to eliminate or reduce the risk to an acceptable level (hazard control and risk mitigation). Hazards encountered in the workplace might include physical, chemical, biological, ergonomic, psychosocial and safety.

What steps are included in the risk assessment?

The risk assessment process can be divided into several steps:

1. Identify the hazards

Hazards can include surfaces that are contaminated with a communicable disease, or individuals that carry and shed the disease. It might include chemicals that are used for cleaning and disinfection, or physical hazards like tools. All these and many more have the potential to do harm.





2. Determine the risk

Determining the magnitude of the risk depends primarily on two factors. How likely (the probability) is it that something bad might happen and how bad could it be (the severity or consequence).

For example, how likely is it that a contaminated surface will be touched, and the person might become infected with a communicable disease? How likely is it that by applying a chemical through spraying, the chemical will be inhaled by the cleaning staff?

What are the consequences if an exposure occurs and how severe are they? For example, with COVID-19, the outcome/consequence can be fatal for certain people and inhaling a chemical can cause severe respiratory damage.

Both together, the likelihood and the consequence will determine how significant the risk is. A risk with low probability and low to medium consequence might be a low risk, while another having severe outcomes and high likelihood will be a much higher risk.

Important: Always document your risk assessment

3. Prioritize the risks

Once you have identified the hazards and determine the risk (for example, low, medium, or high) you can prioritize them for action. Most likely, your focus (will initially be on all of the high risks and you will determine the immediate risk mitigation measures. After that you might determine the actions for medium or low risks based on your risk tolerance and requirements. Keep in mind, there is hardly any “zero” risk. As long as you carry out your work there will always be some risk even after you have applied all necessary risk mitigation steps.

4. Determine your risk mitigation steps

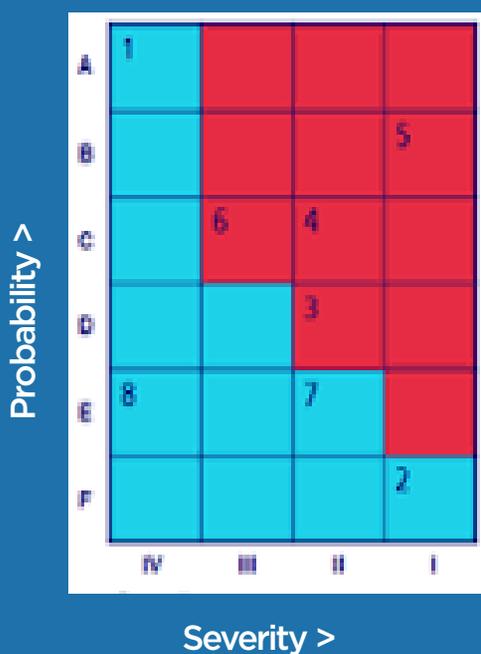
Based on your risk assessment identify the best ways to eliminate or reduce the risk. This can include several different approaches and should be based on the “Hierarchy of Controls” including the elimination or substitution of the hazard, engineering controls, administrative procedures and lastly provision of the correct personal protective equipment (see Q&A section).

5. Review and monitor

Frequently review your risk assessment and mitigation steps especially if something has changed. Similarly, monitoring your mitigation efforts for success is also very important to determine if they are delivering the desired outcomes.

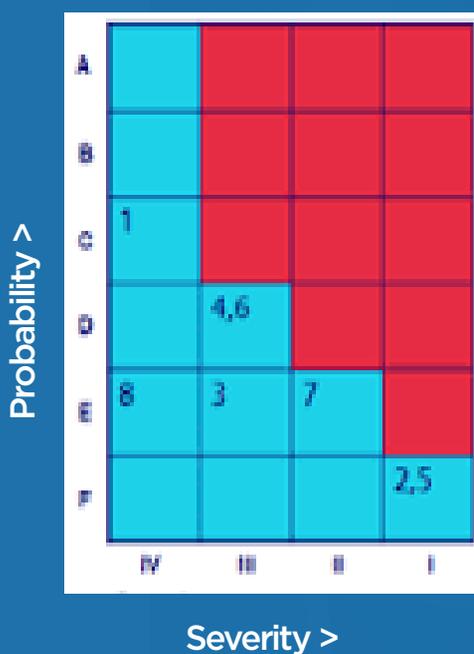


Current Risk Profile



Risks # 3, 4, 5, and 6 are high

Target Risk Profile



Risks # 3, 4, 5, and 6 have been reduced



Q&A

When should hazards be identified?

Hazard identification can be done during the design and implementation of a new process, procedure, or policy, and whenever new tools or chemicals are purchased. Identify hazards before you do the task by for example, checking the equipment and while doing the work especially if things don't seem right. Inspections can be used to identify site specific hazards. Review and near misses and/or accident and incident reports.

How are hazards and their potential harm identified?

Within your work place you might have hazards that are routinely encountered and based for example on the tools, chemicals, and environment your normally work in. For others, they might be new, like a disease that currently causes an outbreak, a new work environment or site to clean, or you are switching to new tools and/or chemicals.

The best and most reliable information on any hazards associated with chemicals products you use is the "Safety Data Sheet" or SDS. Based on your jurisdiction, your employer might be required to have copies of the SDS for all chemicals you are using available to you for review. Copies are obtained from the manufacturer of the chemical.

Information on biological hazards can be obtained from your local public health officials and disease experts. For hazards associated with tools and equipment refer to the product information and/or contact the manufacturer. If available, always consult with your local health and safety professional on any health and safety concerns and issues and/or talk to your manager.

If you work at a new site or location perform a site-specific risk assessment before commencing the work. By visiting the site and performing a walk through, local and site-specific hazards can be identified. By looking at the work area in person you will be able to better assess your proposed workflow and processes.

How are risks prioritized and why?

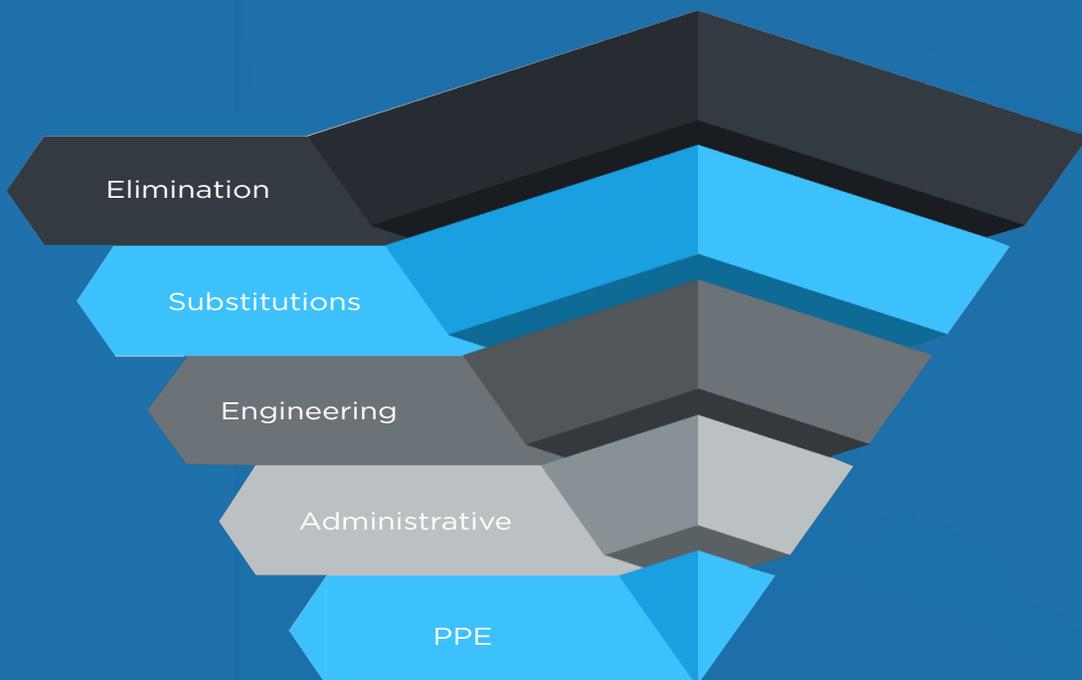
By ranking and prioritizing risks, you will be able to determine which risks are the highest and might require to be controlled first. The severity can be determined by the degree of injury or harm caused. For example, getting sprayed with a mild detergent/ water solution is less likely to cause harm than by a concentrated bleach solution. Prioritizing of risks will also help you to assign resources and determine optimal processes.

Risk Matrix

	LOW	MEDIUM	HIGH
Likelihood >	LOW	MEDIUM	MEDIUM
	LOW	LOW	LOW
		Impact >	

What are specific risk mitigation tools and methods?

In general, control measures are ranked and grouped by their efficacy and should be considered in the following order based on the “Hierarchy of Controls”.





Try to **eliminate or substitute the hazard**. For example, if you have a choice of which chemical and application method you are using, select the one that is less hazardous, like wiping vs aerosolizing. If you are dealing with a communicable disease, you can look at pre-screening and assessing clients, customers and staff entering your facility. Based on applicable public health recommendations and procedures that will potentially prevent the spread of the disease in the first place, thus avoiding getting it into your facility and workplace.

Apply **engineering controls**. For example, use chemical application tools and or cleaning equipment that are appropriate and safe for the task at hand (e.g., vacuums with HEPA filters). Use physical barriers between people where needed and appropriate for a communicable disease. Have the HVAC system running to avoid the build-up of airborne hazards.

Use **administrative controls**. This includes for example, clear and concise standard operating procedures. SOP Training and education of your workforce. Application of physical distancing, good hand hygiene practices, illness reporting, etc. Restricting access to certain areas and/or limit occupation, proper signage and communication, etc.

Personal protective equipment (PPE). PPE is considered the last line of defense and should not be used in substitution for any of the above-mentioned methods and tools, only in combination. If a PPE fails, exposure will happen. Select the PPE based on the hazard and risk identified. Review your local and/or regional legislative requirements for PPE to establish any necessary and required programs for example a “respiratory protection program” if you need to wear a respirator. If you face difficulty acquiring the proper PPE, consider what adjustments in your other steps are required to avoid putting workers at risk.

What documentation do I need?

Documenting your risk assessment is very important.

If it is documented, it is done!

A documented risk assessment will allow you to engage stakeholders, demonstrate due diligence and allow for communication and training. In addition, documented standard operating procedures (SOP), processes and other mitigation tools are needed for consistent application, verification of completion, training, continuous improvement and more. Risk assessment documentation is also needed for the [GBAC Star Accreditation Program](#). (< link)

Eight-Step Risk Management Plan - Suggested "How To" Approach for GBAC Facility Accreditation

1. Assemble a multidisciplinary team – facilities are using their GBAC Team. Team members need to be qualified
2. Establish goals and objectives for reducing risk – for example: reduce pathogen transmission
 - a. Use SMART approach
For example: restoring certain services by a certain date and then maintaining them
3. Describe the flow and user experience for any event, client, customer etc. for a communicable disease
 - a. Describe the user experience from arrival at the building and through various functional locations within the building until they exit or depart
4. Identify the hazards
 - a. Identify space type and location in the building
 - b. Identify primary hazard – biological e.g., SARS-CoV-2 virus
 - c. Identify secondary hazards – physical, chemical, biological, psychological





5. Characterize the potential risk (likelihood and consequence)
 - a. Provide short description of risk characterization and identify any source of information you used
 - b. Determine occupant risk level – employees and patrons for high, medium, and low traffic locations
 - c. Determine the activity risk level – for example, direct contact with client
 - d. Using risk characterization (description, occupant, and activity) the team determines if the risk is significant for each hazard identified at each building location
6. Using the hierarchy of controls, identify controls for each hazard determined in Step 4
 - a. Elimination – can the hazard be physically removed
 - b. Substitution – can the hazard be replaced
 - c. Engineering controls – isolate people from the hazard, HVAC, signage
 - d. Administrative controls – if needed, change the way people work, SOPs, training, etc.
 - e. Personal Protective Equipment policies and procedures for each hazard
7. Verify hazard controls and mitigation steps
 - a. Describe protocols to verify that the controls as designed are maintained
 - b. Maintain a log for cleaning and disinfection of surfaces
8. Validate hazard controls and mitigation steps
 - a. Assess whether actual controls are performing to meet the design intent
 - b. Perform testing to determine whether actual applied controls are performing to meet design intent

References and tools: (click links below)

https://www.ccohs.ca/oshanswers/hsprograms/risk_assessment.html

<https://www.hse.gov.uk/risk/>

<https://www.ecdc.europa.eu/en/all-topics-zscientific-advice/risk-assessments>

<https://www.cdc.gov/infectioncontrol/guidelines/healthcare-personnel/assessment.html>

<https://www.osha.gov/shpguidelines/hazard-identification.html>

GBAC Risk Assessment Template (< link)