

Staying Healthy, Safe and Looking After the Environment

A Guide for Off-Site Workers

Contents

O1 Laying the Foundations

Everyone, Everywhere, Every day
Policy
Expectations
Code of Conduct
Our Zero Harm Life-saving Rules
Maturity Model
Occupational Health and Wellbeing
General Responsbilities
Applying Our High Performance Culture
HSE Management System

O2 Travelling Safely

Driving for Work
Safe Driving
Routine Car Checks
Traveller Health
Personal Security
Terrorist Attacks
Hotel Safety
Travel Health - Infection, Allergy and
Poisoning
Taking Care Before You Travel
Pre-Travel and Deployment Checklist
· · ·

03 Offsite Working Location Safety

Staying Safe at Offsite Locations Introduction to the Work Site Personal Protective Equipment (PPE) Housekeeping Slips and Trips Encountering an Unsafe Situation When Offsite	27 28 29 30 31 32
Working Airside	33
Working Offshore	34
Lone Working	35

04 Dealing with Risk

Hazard, Event, Risk and Controls	37
Types of Risk Assessment	38
Interfacing with Customer Activities	39
and Others	
Actions to be Performed	40

05 Handling Hazardous Substances

Hazardous Substances	42
Globally Harmonised System (GHS)	43
Safety Data Sheets	44
Personal Protective Equipment (PPE)	45
Report Symptoms	46

06 Using Work Equipment

Operating Work Equipment and Machine	ry 48
Work Equipment and Machinery Hazards	49
Fluid Hazards	50
Examples of Incidents	51
Do's and Don'ts	52

07 Managing Higher Risks

Isolation / Permit to Work / Lockout Confined Spaces Confined Spaces Considerations for Working at Height Working at Height - Work Equipment Requirements	54 55 56 57 58
Work at Height - Ladders and Stepladders Electrical Safety	59 60
Asbestos	61
Fire & Explosion	62
Hot Work	63
Hydraulic / Pressure Systems	64
Lifting Operations and Equipment	65

Ionising Radiation Hazards66Non-ionising Radiation67Workplace Transport / Mobile Work68Equipment8Working at Altitude69

08 Looking After Your Health and Wellbeing

Sleep	71
Move More	72
No-Equipment Workout	73
Staying Hydrated	74
Eat Well	75
Taking Care of Your Mental Wellbeing	76
Manual Handling	77
Noise	78
Extreme Temperatures	79
Workstation Ergonomics	/ 80

09 Looking Out for the Environment

Environment Waste	82
Hazardous Substances and the Environment	83
Environmental Incidents	84

10 Reporting Incidents

Points to Remember	86
Responsibilities	87

Introduction to this Guide

This Guide provides Rolls-Royce Offsite Workers with critical HSE information to help stay safe while working away from Rolls-Royce sites.

It provides information, aligned to the Certified to Operate training that you should already have completed, and can be used as a quick reference guide and reminder of safe working practices when working offsite.

Click here for Help and Support >

Help and Support



All modules of the Off-Site Worker Certify to Operate (CtO) training curriculum

Any of the modules can be revised at any time to act as an aide memoir if required



Your Line Manager

Your Line Manager is there to offer help and support - if you have any concerns always speak to them - they will be able to get you the help you need



Your local HS&E Team

Every business has a HS&E Team who can offer help and support on any of your issues or concerns



Image: Laying the
Foundations

Everyone, Everywhere, Every day

At Rolls-Royce we strive to be known for the excellence of our Health, Safety and Environment (HSE) performance and we have policies, processes, procedures, tools and training to support this.

For more information on how our management system supports HSE excellence, click on the following links.

Policy	>
Expectations	>
Code of Conduct	>
Our Zero Harm Life-saving Rules	>
Maturity Model	>
Occupational Health and Wellbeing	>
General Responsibilities	>
Applying Our High Performance Culture	>
HSE Management System	>

Policy

We strive to be known for the excellence of our Health, Safety and Environmental (HSE) performance across our activities, products and services, as an integral part of our brand promise of 'Trusted to deliver excellence'.

We believe that high levels of HSE performance are fundamental to doing business with our customers, delivering value for our shareholders and supporting the communities in which we work.

Our Goals

We take personal and collective responsibility, with our suppliers, contractors and joint ventures, to:

- Create a safe work environment that supports employee wellbeing with no injuries, no work-related ill-health, no environmental incidents;
- Prevent or minimise the adverse HSE impacts of our activities, products and services, and support the sustainable use of resources

Click here to view our signed policy >

Expectations

Everyone, Everywhere, Everyday will:



Meet our high standards, assure compliance with legal and other requirements

02

Reduce risks and impacts throughout our activities, products and services



Integrate HSE into our business processes

04

Intervene when concerned about an activity or decision, and seek advice and support



Drive continual improvement by setting targets, and report progress regularly



Engage, listen and communicate openly

Code of Conduct

The code of conduct, which aligns to our HSE Policy, is followed globally across Rolls-Royce.

- 1 Set high standards for your HSE behaviour and expect the same of others
- 2 Make sure that you understand the HSE requirements of your role
- 3 Always work to our HSE Policy and standards
- 4 Stop work if you think it is unsafe
- 5 Intervene if you are concerned that an action or decision might result in non-compliance
- 6 Make sure you are up to date on the HSE competence for your role
- 7 Report and support learning from all HSE incidents (including near misses)
- 8 Speak to your manager if you are concerned that actions or decisions may result in us not meeting our HSE Policy or standards
- 9 Do not put yourself or others at risk from your actions



Our Zero Harm Life-saving Rules

We all do different jobs, work in different places, face different challenges every day. We have different lives, backgrounds, and ways of looking at the world around us. But there's one thing we all have in common – we want to get home safe at the end of every day.

At work we call it Zero Harm. It means operating safely every day and taking care of our health, safety and environment to create a place to work where we can all be at our best.

Our Zero Harm Life-saving Rules are a simple guide to staying safe every day. Ten rules to follow - no matter where you work or what you do - that will protect your life.

The rules are simple – five things to **ALWAYS** do, five things to **NEVER** do. The results couldn't matter more - fewer incidents, less injury, no fatalities. A safer, healthier workplace for all of us.

View Our Life-saving Rules poster >

Click here to watch our Zero Harm video >

66

"Zero Harm to health. Zero Harm to people. Zero Harm to our environment. That's our destination. And we are making positive progress on our journey towards it. But, we have further to go.

I have a clear picture in my mind of what our destination looks and feels like. It's a place where 'Zero Harm' is so firmly embedded in our DNA that whatever we are planning or doing and wherever we are in our business, ensuring that eliminating health, safety and environmental risks will simply be part of how we do things here.

It's about a mind-set that poses a constant call to action – 'What can I do to further reduce or eliminate any adverse effects arising from the work we do at Rolls-Royce?'

I am looking forward to working with you all as we make great progress towards our Zero Harm future."

Dr David Roomes Director of HSE and CMO

Maturity Model

Our HSE Vision is to achieve Zero Harm to people and the environment. That Vision is supported by a clear set of strategic principles and is underpinned by KPIs, themes and enablers.

Our HSE Vision is to create a sustainable business through the Journey to Zero Harm. That Vision is supported by a clear set of strategic principals and is underpinned by KPIs, themes and enablers. At work we call it Zero Harm. It means operating safely every day and taking care of our health, safety and environment to create a place to work where we can all be at our best.

Click here to view Vision graphic >

High Reliability Proactive Pathological

Click each box to find out more >

If you would like to know more about Zero Harm and how you can potentially improve our safety performance and culture you will find some useful materials on Engine Room via the HSE intranet page. Don't forget you can also ask your local HSE contact for support.

Corporate Occupational Health and Wellbeing

We recognise that health and wellbeing are the foundation of high performance, enabling individuals, teams and the organisation to succeed. We call this Healthy High Performance!

 Manage risks to worker health to stop people becoming sick as a result of their work

 Enhance wellbeing and resilience to enable and empower people to achieve and sustain greater levels of personal wellbeing so they are more present, more engaged and more productive

General Responsibilities

HSE is a line management responsibility and we expect everyone, everywhere, everyday to take personal and collective responsibility to help fulfil our HSE vision and goals.

Click the numbers to find out more >



Applying Our High Performance Culture

A high performance culture (HPC) is as important in HSE as it is across all aspects of our business. These three features of HPC are particularly relevant:

Hover over each box to find out more >





HSE Management System

The HSE management system is governed by the HSE Process Council and comprehensively sets out expectations across our group risk profile through short, clear standards supported by guidance, tools and training.

Our HSE management system operates at four levels, including the HSE Policy.

Click each box to view the four levels >





Driving for Work

Driving for work is...

Driving between different work locations, driving to and from sites and driving to and from airports/railway stations to connect with other forms of transport.

Driving for work is not...

Driving to and from home to the normal place of work at the start or end of the working day (unless local legislation classifies this as work activity).

Watch the Driving for Work video >

Drivers must

- Have valid insurance covering business use
- Have a valid driving license for the vehicle and country they drive in
- Comply with local legislation and driving codes
- Adjust driving speed dependent on road and weather conditions
- Be familiar with the controls in any vehicle they drive
- Wear a seat belt and make sure any passengers do the same

Click here to view the full list >

\otimes

Drivers must not

- Ride or drive a motorcycle
- Drive under the influence of alcohol or drugs
- Drive if they are too tired to do so safely
- Use a hand-held phone or device whilst driving
- Drive until they have had a least six hours of rest:
 - After a flight of six hours or more
 - After any flight that departs between 22:00 and 04:00

Click here to view the full list >

Safe Driving

Here are some of the considerations that you need to keep in mind when driving for work.

Hover over each box for more information >



Hover over the icon to find out what you should ALWAYS do...

Hover over the icons to find out what you should

NEVER do...





(î:

Routine Car Checks

Let's look at some routine safety checks you should perform on your car on a regular basis:

- Check the tyre pressure and tyre condition of your car regularly. It is best to check the pressure when the tyres are cool, usually just before you set-off on your journey.
- Check that the windscreen wipers of your car are working efficiently.
- Check your lights such as headlights, indicators, brake and hazard warning lights.
- Make sure that the seatbelts in your car have not become visibly damaged. Don't forget to check that the seatbelts lock properly.
- Check that the horn is functioning properly.
- Make sure that the levels of various fluids, such as engine oil, coolant, brake fluid, windshield-washer fluid etc, are not running low.
- Check the side-view and rear-view mirrors to ensure that they are operating efficiently.



Traveller Health

One risk that is sometimes associated with travelling is Deep Vein Thrombosis (DVT). Let's examine the precautions you can take to reduce the risk of DVT.

History of DVT

- Check to see whether you are insured to travel, i.e. declare any known medical problems
- Discuss your problem with the company Occupational Health provider

Travelling

- If you are travelling on an aircraft, train, boat or coach, stand up regularly and move around whenever possible
- If you are driving or travelling in a chauffeured taxi, stop the vehicle regularly to stretch your legs

Water

- Drink plenty of water
- Perform leg-stretching exercise



What is Deep Vein Thrombosis?

Deep vein thrombosis, also known as DVT, is a blood clot that develops within a deep vein in the body, usually in the leg. DVT usually occurs in a deep leg vein, a larger vein that runs through the muscles of the calf and the thigh.

Personal Security

It is always better to be safe than sorry - here are some tips to stop you becoming a victim of crime:-

Click on each box below to view the tips >







Terrorist Attacks

While terrorism can occur at any time around the world, certain places are more prone to terrorist attacks. Take these steps when travelling to areas with a history of terrorism.

Click on each box to learn more >



Hotel Safety

Hotels are best booked on recommendation and via the Rolls-Royce travel service provider.

Travellers should familiarise themselves with details of a hotel and its location before arrival. Security may be difficult but certain precautions may be advised:

- Where possible, choose a room not on the ground floor (to improve the potential security of the room).
- Look for safety features such as smoke detectors and audible fire alarms.
- Carry out an initial inspection of the room to familiarise the layout.
- Maximise door security by using the key and where fitted, safety chain and window locks.
- Check the position of the nearest fire alarm and extinguishers, the emergency exit route and any other possible escape routes in case of fire. The emergency route should be followed to the final exit - which should be checked for ease of egress.

Click here to view the full list of precautions >

206

Travel Health -Infection, Allergy and Poisoning

If there is a risk of infection, allergic reaction or poisoning a risk assessment should be carried out.

Click on each box to find out more >

Potential Risks

IND OUT MORE

Control Measures and PPE

IND OUT MORE

Safeguarding Against Infection, Allergies and Poisoning

FIND OUT MORE

Taking Care Before You Travel

Due to the global nature of our business, many employees travel for work to a wide variety of locations outside of their home countries.

Travelling to an overseas country may expose you to a number of and safety risks in unfamiliar environments. Even those countries that your travel frequently to can hold hidden risk.

Those travelling on company business together with their managers shall ensure that they are both aware and comply with the company travel policy and associated procedures.

To ensure you are compliant with our Company travel requirements there are a number of steps you can follow.

Click here to view the the steps >

The travel risk assessment and the pre travel health assessment should be reviewed prior to each trip that takes an employee outside of their home country irrespective of duration or if they have visited that location previously.



Pre-Travel and Deployment Checklist

The checklists provide typical HSE considerations to ensure deployment of field service engineers are in-line with minimum company HSE expectations and align to our company value, "We Operate Safely".

This does not replace any existing deployment checklists or arrangements that may already be in place.

General Checklist	>
Before the Trip Checklist	>
Travel Security Requirements Checklist	>
Confirmed with Customer Checklist	>
Confirm at the Place of Work Checklist	>

OrginalOffsite WorkingLocation Safety

Staying Safe at Offsite Locations

Different environments that you may work in whilst offsite may present specific risks that you need to be aware of.

For guidance on how to remain safe when at an Offsite location, click on the following links.



Hover over the icon to find out what you should **ALWAYS** do...



View Life-saving Rule quote

Induction to the Work Site	>
Personal Protective Equipment (PPE)	>
Housekeeping	>
Slips and Trips	>
Encountering an Unsafe Situation When Offsite	>
Working Airside	>
Working Offshore	>
Lone Working	>

Introduction to the Work Site

When arriving at the non-Rolls-Royce location, it is important your host provides you with a site induction, this induction needs to cover the critical information you need to keep you safe and healthy during your time on their site.

As a minimum this needs to cover the below information:

- Site emergency evacuation procedures, routes and assembly points
- First aid availability and processes
- Any key hazards and associated controls on the site, including those specific to the location at which you will be working - and associated risk assessments where applicable
- Any site safety rules you need to adhere to
- Any PPE requirements
- Key contacts on site and any supervisory hosting arrangements
- Location and availability of welfare facilities i.e. toilets, drinking water, break areas, etc.
- Arrangements to manage working with or near others to ensure deconfliction is considered
- How to raise and HSE event on site
- High hazards you need to be aware of on site
- Local permits or work authorisation procedures
- Any shared learning from recent events on site that may affect you

Please Note

If you are not offered an induction by your host, please ask them to provide you details on the information bulleted.

Personal Protective Equipment (PPE)

It is important to understand the nature of the hazards to which you may be exposed.

Information about the hazards and the required control measures will be included in the risk assessment for the task/visit. Further information can be obtained from the host site controller/safety representative.

Depending on the type of work being undertaken you may need some or all of the following equipment.

Also, please obey any local requirements/ signage on PPE use.

Click on the numbers to find out more >



Housekeeping

Ensure you keep your designated work area clear of trailing cables and hoses or any other items that yourself or others may trip or slip on.

You must ensure you check that:

- Storage facilities are tidy and racking or shelving are stable
- Areas are free of accumulated rubbish
- Work equipment is clean and in good order
- Fire escape and evacuation routes are clearly identified and free of obstructions
- Waste storage areas are clearly identified
- There is no oil and water on the floor
- Periodic workplace inspections are carried out to ensure compliance

R colls-Royce

C

Slips and Trips

Slips & trips are one of the most common causes of major injuries at work. They occur in almost all workplaces, and major slips can result in broken bones and be the initial causes for a range of other accident types such as falls from height.

Click the tabs to find out more >

Look out for the following hazards and always exercise caution

Actions to protect yourself

- Wet and polished floor surfaces, potholes, raised paving slabs and other fixed trip hazards (raised structures, hatch profile, pipe-work, cable trays, etc.)
- Spilt oil, fuels, lubrications, powders, etc.
- Loose floor coverings, trailing cables, and items of equipment
- Defective stairways or damaged/missing handrails
- Adverse weather conditions, snow, ice or standing water (hiding potholes)

Encountering an Unsafe Situation When Offsite

Whatever work you undertake, it should always be within your own capabilities, training and experience; and in accordance with Rolls-Royce procedures (or local requirements if they exceed those of Rolls-Royce). If there are any doubts these procedures should always be referred to.

Should you identify a potential or actual risk to HS&E when working offsite, you should in the first instance stop work and report it to the host organisation's management or safety representative, outlining your concerns and requesting corrective action.

If the host cannot make the situation safe, and it poses an unacceptable risk to HS&E, then you are empowered to stop work, inform the host organisation's representative of your continued concerns and inform your Rolls-Royce manager so that appropriate support can be given to both yourself and the host organisation to resolve the situation.

Working Airside

When working airside there are a few rules and regulations which must be followed - here are some tips to ensure you are working safely.

Click on each box below to view the tips >







Working Offshore

It is recognised that working onboard a ship whilst it is at sea has a greater affect on HS&E than normal. Movement of the ship can increase the level of risk from existing hazards and much greater care is needed, particularly in rough weather.

Motion of the ship whilst at sea will also induce tiredness. Consideration should therefore be given to supplying enough personnel to cover two shifts where necessary to complete the work.

Click here to read about Seasickness >

Click here for info on Transfers at Sea >

Lone Working

Persons working alone or in a remote location should be aware of the additional risks associated with being unaccompanied. The following points should be considered:

Click each box to find out more >








Hazard, Event, Risk and Controls

Before we examine the importance of risk assessment, let us become familiar with the following terms.

Click each box to view the definitions >









Types of Risk Assessment

Hazards associated with the work you undertake need to be assessed to ensure that appropriate controls are in place. Some risk assessments can be conducted in advance – we call these Generic and Specific Risk Assessments.

In addition to the hazards we can assess in advance, there are likely to be hazards encountered at non-Rolls-Royce sites which are specific to the particular location / situation – hazards which are often dynamic in nature due to the progress of the work activity. Such hazards also need to be assessed to understand the level of risk they pose and whether any additional controls are required. Such assessments are called Dynamic Risk Assessments.



Click the tabs to learn about each type of assessment >

Click here to read more >

Interfacing with Customer Activities and Others

At times, you may be required to work in areas where other contractors are working.

Where this is the case, it may be that different hazards are introduced as a result of different activities taking place in close proximity. As well as using dynamic risk assessment, risks associated with working alongside other contractors can be reduced by working closely with the other contractors to understand what they are doing and how the risks associated with their activities may affect you – as well as how risks associated with what you are doing may impact them.

Click on each circle to learn more >

View Our Life-saving Rules >



Actions to be Performed

Let us look at a few actions you can perform to ensure safe working alongside other site contractors.

Drag the blue bar to each icon to find out more >

Unsafe Acts

- If you see any unsafe acts and conditions, speak up and address them immediately where it is safe to do so
- Report 'Near Misses' to site management and your Rolls-Royce Manager
- Report any rule breaking to site management







Hazardous Substances

In order to control the risks associated with hazardous substances in the workplace, current legislation requires employers to conduct risk assessments to:

- · Identify any hazardous substances in the workplace
- Decide who may be affected by these substances
- Put appropriate control measures in place to reduce and manage the risks
- Inform you of the substances identified and the associated health risks
- If appropriate, monitor exposure and carry out health surveillance
- Prepare procedures to deal with accidents and emergencies

Click here to view Employee Responsibilities >



Globally Harmonised System (GHS)

The GHS is a single worldwide system for classifying and communicating the hazardous properties of industrial and consumer chemicals.

These symbols are important as they warn the user of the key risks with using and handling that substance. The symbols can be found on the packaging of any hazardous substances. Substances used during your work should already be assessed as part of a hazardous substance assessment.

Click the arrows to view the symbols >



Safety Data Sheets

Safety Data Sheets are provided by suppliers and manufacturers of hazardous substances considered dangerous for supply.

The supplier must send the data sheet when the substance is first ordered or if the formulation changes. The Safety Data Sheet provides more technical and detailed information about the substance, how to use it safely and what to do in an emergency situation.

Employees who work with such substances should be provided with a copy of the data sheet. If one is not provided, you should request one from your employer.

Personal Protective Equipment (PPE)

In some situations, PPE may be required for handling substances. Any such requirements should be articulated in the hazardous substance risk assessment. As with any PPE you are supplied, you should ensure you have been trained in their proper use.

It is also up to you to use the items only for the intended purpose and to maintain your PPE in good condition.

Click on the numbers to find out more >



Hover over the icon to find out what you should **ALWAYS** do...





Report Symptoms

Should you notice any symptoms of ill-health during or after working offsite, you should report these to your line manager and HSE advisor/ manager immediately.

If there are a lot of similar health complaints related to the same type of work or use of a substance, your employer may set up a Health Surveillance programme.

A Health Surveillance programme facilitates the early detection of ill health caused by use of a particular substance in the workplace. It should be completed by an occupational health service physician and includes keeping health records for individuals.

Using Work Equipment

Operating **Work Equipment** and Machinery

Where you are required to operate non-Rolls-Royce work equipment on-site you must get permission from the work equipment owner. It is also essential to note that using this work equipment may expose you to a number of risks, which will need controlling for prevention from any harm or injury.

To prevent the risk of injury or harm it is essential you only use work equipment if you:

- Are authorised to operate by Rolls-Royce (and the site where applicable)
- Have received correct familiarisation training for the equipment
- Obtain proof of any test certification, calibration or relevant maintenance regime relevant to the operation of the equipment
- Obtain or carry out a specific risk assessment for the equipment and its operation
- Understand and have available all the correct controls to protect you and others from the hazards of work equipment (i.e. guards, PPE, signage, safe-working area, etc.)



Hover over the icon to find out what you should ALWAYS do...



View Life-saving Rule quote



Hover over the icon to find out what you should VEVER do...



View Life-saving Rule quote

Work Equipment and Machinery Hazards

It is important to note that safely operating work equipment and machinery is of utmost importance as the consequences for using it incorrectly can be devastating. You should not operate any work equipment unless you have received the relevant training on the equipment.

Hover over each box to learn about the common hazards >

You should also ensure that you are aware of the main hazards associated with the equipment you are working on.









Ejected Items or Fluids







Fluid Hazards

There are also many hazards related to the fluids that may be contained within work equipment and machinery.

Click the tabs to find out more >

Pressurised Hoses Biological/Chemical Hazards

Fluid Systems

Fluid Systems

- Don't work with a machine, if any of the fluid systems shows any sign of wear or damage.
- Ensure the system is correctly isolated (LOTO) prior to commencement of any work.
- Never begin work on a fluid system, until you are fully trained or without a risk assessment being completed.

Examples of Incidents

It has been observed that most on-the-job injuries occur due to the improper or incorrect use of hand tools. Let us take a look at a few incidents that have happened due to the incorrect use of these tools.

Hover over each box to read about the incidents >



Do's and Don'ts

Always remember that no job is so urgent that it cannot be done safely. Given below are a few do's and don'ts that you should follow whilst working with hand tools.



Image: ManagingImage: Higher Risks

Isolation/ Permit to Work/ Lockout

A permit to work (PTW) is formal written authority to operate a planned procedure, designed to protect personnel working in hazardous areas or activities where the hazards are not within their direct control.

Rolls-Royce employees may be required to work to an existing customer PTW system in operation on a host organisation's work site. You should endeavour to assure yourself that the PTW system is comprehensive and fully operational before you or any Rolls-Royce contractors undertake to work under the constraints of the PTW. Full training must be provided by the host site controller/safety representative where Rolls-Royce employees are required to be the responsible persons involved in the permit to work process.









Confined Spaces

Confined spaces are generally enclosed or partially enclosed areas with restricted entry or exit. Such areas are not usually designed for normal human occupancy.

As an Off-Site worker, you may at times be required to work in such confined spaces. However, the location, construction or atmosphere of these areas may pose a risk to your health and safety.

Take a look at a few examples of confined spaces:

Tunnels >

Ship's Hull >

Utility Vaults >

Exhaust Areas on an Aircrafts Engine >

Note – Confined spaces don't always have to be enclosed, for example and open top trench, large open tank or CLE intake could be, if any of the above prescribed foreseeable risks may be present. A suitable and sufficient Risk Assessment will help you determine if the 'place' you are assessing is a confined space.



Hover over the icon to find out what you should NEVER do...



View Life-saving Rule quote



Confined Spaces

Work in confined spaces usually requires authorisation under a Permit to Work process – please verify this with your host before commencing any work in confined spaces.

A confined space is a place which is substantially enclosed (though not always entirely), and where serious injury can occur from hazardous substances or conditions within the space or nearby (e.g. lack of oxygen due to the presence of argon).

Definition of a Confined Space:

Confined spaces defined as being any place which because of its enclosed nature presents a foreseeable risk of harm to any person in that place caused by either;

- Serious injury from a fire or explosion;
- Loss of consciousness arising from an increase in body temperature;
- Loss of consciousness or asphyxiation arising from gas, fume, vapour or the lack of oxygen;
- Drowning arising from an increase in the level of a liquid; or
- Asphyxiation arising from a free flowing solid or the inability to reach a respirable environment due to entrapment by a free flowing solid

KemppiBeta 90

Considerations for Working at Height

Prior to embarking on any work at height activity, here are a few important considerations you should keep in mind.

Please note: The working at height hierarchy shall be considered and applied prior to any working at height activity:

- Avoid working at height;
- Prevent a fall from height;
- Minimise the consequences of a fall from height; and
- Reduce the risk of a fall from height
- Check with your host as a permit to work may be required before commencing any work at height

Planning for Work at Height checklist >

Hover over each box to find out more >









Hover over the icon to find out what you should **ALWAYS** do...



View Life-saving Rule quote

Working at Height - Work Equipment Requirements

Any work at height and use and checking of associated work equipment and PPE should only be carried out by trained and authorised persons. Prior to any work, the working at height equipment should be pre-checked for suitability to the work environment and weather conditions.

Here are some checks you can perform to ensure that the equipment is in safe working condition before use.

Click each tab below to go through the checks >

×	Check 1
Make sure that all formal inspections are up-to-date.	
+	Check 2
+	Check 3
+	Check 4
+	Check 5

Selecting the Right Work Equipment

Now, let us look at some important points to consider when selecting which type of work equipment to use.

Click on each circle to view the points >



Don't forget you should be selecting work equipment and any PPE in relation to the working at height hierarchy of control.

For example – prevention of a fall via the use of safe designed platforms or Mobile Cherry Pickers (MEWP's) would provide a higher level of protection than minimising consequences using harnesses and ladders.

Work at Height -Ladders and Stepladders

One of the most common types of equipment used for work at height activities are ladders and stepladders. But, ladders and stepladders are also involved in more falls from height than any other kind of work equipment. Therefore, it is imperative to carefully plan work and use risk assessment to identify the tasks/activities that can be completed safely from a ladder or stepladder.

Ladders or stepladders should only be used:

- In one position for a maximum of 30 minutes
- Where a handhold is available
- For 'light work'
- Where the worker can maintain three points of contact (hands and feet) at the working position

Click here to view examples of good practices >

Did you know there are some good alternatives to step ladders and ladders? Here are some typical examples. These offer a higher level of fall protection and in many cases help you achieve controls higher up the WAH hierarchy of control.

Electrical Safety

No one should work on electrical equipment unless fully trained, qualified and authorised to do so.

The risk of electric shock is greater in the Services environment because cables or equipment may be exposed to wet conditions, damaged by plant or falling objects, etc. When assessing the risk, you need to think about the hazards that are present, who may be harmed and how, and the effectiveness of existing precautions.

Please note: Even when not working on electrical equipment, it is important that you remain mindful of any potential electrical risks in the environment and activities you are involved in.

Click on each box to find out more >

Ask Yourself the Following Questions

FIND OUT MORE

Precautions

FIND OUT MORE

Equipment and Tools

FIND OUT MORE

Asbestos

Exposure to Asbestos can be fatal. Asbestos should only be handled by trained and specifically licensed persons.

There is a huge legacy of asbestos having been used as insulation lagging and fireproofing materials in the shipbuilding, aerospace and the construction industry for many years.

Asbestos materials in a good condition are safe unless the fibres become airborne through damage or disturbance. Inhalation of asbestos fibres can cause serious diseases (typically >15 years after exposure to asbestos).

- Asbestosis
- Mesothelioma
- Asbestos related lung cancer
- Diffuse pleural thickening

Click here to find out when you may be at risk >

Protecting Yourself

Stop and ask if you suspect asbestos is present or if you think the work should be carried out by specialists (licensed contractors). If asbestos is suspected do not proceed until the area is declared free of asbestos.

Click each tab below to read what not to do >

×	DO NOT
	Get involved in work with Asbestos
+	DO NOT

Fire & Explosion

All employees should become familiar with the emergency procedures to be followed in the event of a fire. Enquire with the controller of the host site if this information was not part of your induction to the site.

Hover over each box for tips on staying safe >

















Hot Work

You should not perform any hot work unless specifically trained, qualified and authorised to do so, and a risk assessment has been completed.

Hot working includes work, which involves the use of naked flames or generation of sparks, smoke or fumes, e.g. gas/electric welding, cutting and grinding.

- The need for hot working should be avoided or consideration given to changing the method of work to minimise the risks.
- Prior to any hot work commencing, a careful assessment of the risks should be made by a trained and competent individual to identify any significant risks and to determine if a written Hot Work Permit is required.
- A Permit to Work will be required unless a risk assessment establishes that alternative safety controls are appropriate.
- The responsibility for raising a Permit to Work will be that of the host site.
- A Permit to Work will detail the work to be carried out, how and when it is to be done and any precautions to be taken.



Hydraulic/Pressure Systems

Hydraulics is a means of operating machinery that moves water or oil through a pipe under pressure.

Injection of high pressure oil from damaged hydraulic hoses or couplings can cause serious injury. All hydraulic hoses, tube lines and fittings should be periodically inspected and where possible visually inspected before work commences.

olls-Rock

Don't work with a machine if the hydraulic system shows any sign of wear or damage.

Ensure the system is positively isolated by lockable means prior to commencement of work.

Never begin work on a hydraulic system until fully trained or without a risk assessment being completed.

Lifting Operations and Equipment

The following summary of requirements sets out what is required when a Rolls-Royce Service activity involves the use of lifting equipment whether it is carried out on a Rolls-Royce site or at other locations not controlled by Rolls-Royce such as customer premises.

Please note: Lifting equipment such as cranes and hoists must only be operated by people who are trained, qualified and authorised.

Click through the slides to view the requirements >

All lifting equipment shall be maintained and lifting operations will be planned and carried out in accordance with the requirements of the Company international Standard and Guideline.

Next requirement >

Complex Lifts

Where a planned lift meets one or more of the following criteria it shall be considered a complex lift:

- The combined weight of the load and lifting equipment to be used cannot be accurately calculated and the best estimated weight is greater than 95% of the crane SWL.
- There is a possibility of the centre of gravity shifting during the lift.
- The load is greater than 50 tonnes (110250 lb) and it is not a straight vertical lift.

Click here to read more criteria's >



Hover over the icon to find out what you should **ALWAYS** do...



View Life-saving Rule quote

Ionising Radiation Hazards

The risk from ionising radiation has to be considered for activities which involve ionising radiation (such as X-Ray or gamma radiography) or involve entering radiologically controlled areas (such as areas containing radioactive material or areas where there is a risk of radioactive contamination).

What is Ionising Radiation? >

Risks of exposure to ionising radiation >

Persons working within an area where radiation or radiological contamination hazards may be present must comply with the host site's rules and procedures at all time.

Health surveillance may be required for persons working with lonising Radiation where Radiation protection expert deems it appropriate. Such work must be strictly controlled, and the following points should be considered by employees who are required to undertake such activities:

Click the circles to view the points

02

Radiation Hazards

01

03

Non-ionising Radiation

Non-lonising radiation can be dangerous if not managed and treated with respect. Even though it does not have the energy levels to ionise atoms on impact like ionizing radiation it still has potential to result in health effects.

The Risks

- Microwaves and radio frequencies can cause heating of any exposed part of the body and in some cases can cause reddening or burns to the skin,
- Infra-red rays can cause skin burns and cataracts,
- UV light can cause skin burns, skin cancer, conjunctivitis and arc eye,
- Exposure UV radiation can damage DNA and can cause health effects, such as cancer, later in life. The risks are small for low levels of exposure but exposure to high levels of non-ionising radiations can cause acute effects such as burns, tissue and organ damage,
- Lasers can cause permanent, severe damage to the eye and skin. Lasers at class 3b and 3r and above are more damaging.

To be able to manage risk associated with non-ionising radiation you need to identify all sources of non-ionising radiations off site workers may be exposed to. Once you have identified the significant risks, you must control them. Click here to view sources of non-ionising radiations >

Try and reduce any exposure to UV radiation as far as possible. For example, you may be able to use safer alternative processes or equipment, e.g. ultrasonic, non-destructive testing instead of X-rays. Provide protection or protection devices from lasers exposure or remove them all together.

Typical Control Measures

- Time Minimise how long you are exposed to the energy source
- Distance Keep as far from it as you can
- Shielding For optical energy sources, put an energy absorbing or reflecting barrier between it and you (e.g. sunscreen for UV)
- Reduce Energy Levels Where you can, use equipment or work in areas where the energy levels are as lows as possible.

The following precautions are all based on these basic principles. Measuring exposure levels of these radiant energy sources and then predicting exposures is a specialist task using highly technical equipment.

Guidance for non-ionising radiation >

Workplace Transport/ Mobile Work Equipment

The most common vehicle accidents at work are caused by people being hit by vehicles/people falling from vehicles. There is also a high risk of objects falling from vehicles on to people and vehicles toppling over.

To protect yourself:

- Comply with measures designed to segregate vehicle and pedestrian movements.
- Always use designated pedestrian traffic routes when walking around site. Don't take shortcuts!
- Observe vehicle reversing alarms and signals, never assume the driver can see you.
- Move to a safe position until the vehicle has moved off.
- Only use transport equipment if trained and authorised.
- Only use vehicles fit for the intended purpose.
- Do not ride on any vehicle not designed to carry passengers
- Always observe the site traffic rules, speed limits, etc.



Working at Altitude

You can get altitude sickness if you travel to a high altitude too quickly.

Breathing becomes difficult because you're not able to take in as much oxygen. Altitude sickness, also called acute mountain sickness (AMS), can become a medical emergency if ignored. Your age, sex or physical fitness do not affect your likelihood of getting altitude sickness Also, just because you may not have had it before, this does not mean you will not get it on another trip.

Symptoms of Altitude Sickness

Symptoms of altitude sickness usually develop between 6 and 24 hours after reaching altitudes more than 2,500m above sea level but this can vary.

Click here to view symptoms >

Preventing Altitude Sickness

The best way to prevent getting altitude sickness is...

Click here to read more >

Preventative Medicines

If you know you think you may be working at altitudes...

Click here to read more >

Treating Altitude Sickness

If you think you have altitude sickness follow these...

Click here to read more >

Complications of Altitude Sickness

If the symptoms of altitude sickness are ignored, they...

Click here to read more >

High Altitude Cerebal Oedema

High altitude cerebral oedema (HACE) is swelling...

Click here to read more >

High Altitude Pulmonary Oedema

High altitude pulmonary oedema (HAPE) is a build-up...

Click here to read more >



Sleep

Adequate sleep doesn't just make you feel better but is a key part of a healthy lifestyle, and can benefit your heart, weight, mind, and more.

Sleep plays an essential role in your health and wellbeing throughout your life. Getting enough good quality sleep has many benefits, including protecting your physical and mental health, quality of life and personal safety.

- When you sleep, important physical and mental processes are carried out.
- Regular, good quality sleep is important for brain functioning, emotional wellbeing, physical health, daytime performance and personal safety.
- Research suggests that adults need at least 7 to 8 hours of sleep each night to be well rested.
- Not getting enough sleep is common and can have serious impacts on your health and wellbeing.


Move More

Regular physical activity is one of the most important things you can do for your overall health and wellbeing. You don't have to make big life changes to see the benefits, just start building more activity into your day - one step at a time. Just move.

Workout Routine

There are many simple exercises you can do, without having to go to a gym, which can help you maintain a healthy heart and body. These can be done easily in your hotel room, accommodation or even during the day at work. Initially, you can start with some agility or mobilising exercises. As you gain momentum, you can follow up with a quick strengthening program. We have provided in this training session some basic exercises, however many more are available from the internet.

Click on the circles to view the benefits >

Click here to view 'Easy Ways to Get Yourself Moving' >

02

Benefits of

Exercising

OI

03

No-Equipment Workout

At times while you are travelling or staying in a hotel room, you may not have enough space or equipment for your regular workout regime. Here are a few simple exercises that you can do in a small space, such as a small hotel room, without any equipment.

Click the arrows to view the exercises >



Resistance Band Workout

You can also use your resistance band to carry out various simple exercises. Let's take a look at some of them.

Click the arrows to view the exercises >



Click here for links to the full instructions >

Staying Hydrated

Often when you feel below par, irritable or even hungry, you may be simply dehydrated.

Water is critical to mental and physical performance, so here's how to ensure you remain fully hydrated throughout the day.

Click on each box to find out more >



Eat Well

Eating nutritious, well-balanced meals isn't always easy when you're travelling and away from home.

You might find between dining out, trying to find healthy food on the go, and eating between meetings, you don't have much control over your schedule and meal times.

But despite the challenges, you can stay healthy with proper planning. Building healthier habits into travelling may be easier than you realise and just takes a bit of time and planning.

Being informed and aware of the nutrition decisions you make through out the day will greatly improve your ability to take care of your health and wellbeing.

Click through the slides to view the tips >

Be healthy at the airport

When eating at the airport, look for restaurants with healthier offerings and avoid fried food. If you have extra time, walk around instead of sitting.

Next tip >

Taking Care of Your Mental Wellbeing

Our Field Service and business traveller groups are exposed to some of the most common workrelated stress factors, including sudden and unexpected workloads, rapidly-changing events and blurred reporting lines and responsibilities.

But on top of these, you also face additional pressures unique to the nature of the work, including:

Jet lag

- Poor sleep and a poor diet
- Diminished peer support
- Being away from home and family

We all have mental health and just like our physical health, we must take care of it and sometimes it can become unwell. Just like the health of our bodies, the health of our minds can be treated and improved too. If you broke your arm you wouldn't hesitate to see a doctor. It should be the same with our mental health.

Click here to view the 'I CARE' guide >

Manual Handling

Incorrect manual lifting and moving of loads is the most common cause of back injury, and may also lead to muscular strains. The most common cause is incorrect posture and wrong application of force.

Any employee involved in any lifting operations should use mechanical aids where necessary. If these are not available, employees must be fully trained to recognise limitations in manual lifting and in safe lifting techniques.

Before you lift there are a few things which you need to consider:

Click on the numbers to find out more >

Keep your back straight and lift using your legs!

Click here to view lifting guideline >



Noise

If you are unsure or uncomfortable with the noise level, use hearing protection. Consider whether:

- You can clearly hear a person speaking in a normal voice at a distance of 2m. If not, then hearing protection is required
- Noisy processes have to be carried out in the general work area or whether they could be moved to dedicated sound proofed areas
- Signs are displayed indicating the mandatory use of hearing protection
- PPE should be considered the lowest level of control. Noise should be controlled at source either by employing a quieter process/method or isolation using acoustic barriers

Extreme Temperatures

Thermal stress can arise from working in hot & cold conditions. This can be affected by air temperature, air movement (wind speed), humidity (wetness), clothing, activity & rest schedules.

Excessive exposure to heat is referred to as heat stress and excessive exposure to cold is referred to as cold stress. In a very hot environment, the most serious concern is heat stroke. In absence of immediate medical attention, heat stroke could be fatal. Heat exhaustion, and fainting (syncope) are less serious types illnesses, which are not fatal but interfere with a person's ability to work.

At very cold temperatures, the most serious concern is the risk of hypothermia or dangerous overcooling of the body. Another serious effect of cold exposure is frostbite or freezing of the exposed extremities such as fingers, toes, nose and ear lobes. Hypothermia could be fatal in absence of immediate medical attention.

Click here to view a guide for working in cold conditions >

Click here to view a guide for working in hot conditions >

While symptoms can vary from person to person, the warning signs of heat stroke can include complaints of sudden and severe fatigue, nausea, dizziness, light-headaches, and may or may not include sweating. If a co-worker appears to be disorientated or confused (including euphoria), or has unaccountable irritability, malaise or flu-like symptoms, the worker should be moved to a cool location and seek medical advice.

Warning signs of hypothermia can include complaints of nausea, fatigue, dizziness, irritability or euphoria. Workers can also experience pain in their extremities (hands, feet, ears, etc), and severe shivering. Workers should be moved to a heated shelter and seek medical advice when appropriate.

All activities involving working in extreme temperatures should be thoroughly risk assessed before commencing. Further guidance can be found by contacting your HSE adviser.

Workstation Ergonomics



Click here to watch Workstation Setup for Mobile Workers >

Looking Out for the Environment

Environment Waste

As a part of your duty to protect the environment, you should make it your responsibility to know the arrangements for waste management at the host site. Check with your host, whenever you are unsure where to dispose certain wastes, to avoid incorrect disposal.

Take a look at some of the important considerations you should be familiar with regarding waste disposal:

- Can you prevent or reduce the amount of waste from your work activity?
- Is temporary waste stored in a manner that prevents pollution (leaks, spills, wind-blown litter)?
- Does the waste need segregating and are there facilities available for this?
- Do you know where the disposal points are located?
- Is waste being disposed of appropriately?
- Can the waste be recycled (read the labels)?



Hazardous Substances and the Environment

Always make sure that while working at the host site, you store, handle and use hazardous materials correctly to prevent leaks and spills that could harm the environment (or people). Incorrect handling of substances can pose a risk to the environment as well as health and safety.

Take care to see that hazardous substances and effluents, associated with the work activities, are not poured down or disposed of down drains. You can always check with your host to know what arrangements are in place.

Leakage/Spillage >

Storage >

Environmental Incidents

So what should you do if an environmental incident, such as a leakage or spillage, actually occurs?

- First, deal with the spill in accordance with site procedures, using suitable spill kits and equipment. You may need help here from trained personnel on-site
- Next, you need to ensure that both the host and appropriate Rolls-Royce contact are aware of any environmental incidents resulting from Rolls-Royce work activities

Important Requirements

- Whom do you contact in the event of an incident?
- Where are the spill kits kept?
- What are the spill kits used for?
- Are a suitable number and type of kits available to deal with potential spills/leaks?



ReportingIncidents

Points to Remember

If you are involved in or witness an incident, you must ensure you do the following:

Hover over each box below for more information \rightarrow







Responsibilities

As an employee, you are responsible for taking care of yourself and others who work with/for you. You also have the responsibility to report work-related accidents, incidents or near misses (on or off Rolls-Royce sites). If you are involved in an accident, incident or near-miss, you must report this to the Host Site Supervisor and your Rolls-Royce manager as soon as possible.

Where an incident involved a Rolls-Royce employee, whilst off-site working, we will want to investigate alongside the site controller.

Any sub-contractors working for you are responsible for reporting and investigating incidents under their control. However, they too must submit all reportable events or circumstances to Rolls-Royce and the customer who may carry out their own investigation.

Reporting Incidents

There is an electronic incident reporting system available to all employees for reporting incidents. However, as each business may have different reporting methods for communicating an event, you are advised to contact your Business HS&E Advisor to ensure you follow the correct reporting procedure.

Click here to view the MIS app setup instructions >

Download instructions 👱



R

Hover over the icon to find out what you should **ALWAYS** do...

77 View Life-saving Rule quote

System Index

Rolls-Royce operates and maintains an HSE management systems to enable us to manage HSE hazards and associated risks within our business.

There are two main document types – Management Standards (MS) and Control Standards (CS). If your want to know more, you can visit our Engine Room pages for information and guidance within our standards. If you need support of technical guidance can reach out to your HSE representative / advisor.

Management Standards

- MS00 HSE MS 00 HSE Master documents
- MS01 HSE MS 01 Stakeholder Engagement
- MS02 HSE MS 02 Policy
- MS03 HSE MS 03 Plans, Objectives and KPI
- MS04 HSE MS 04 Governance & Management Review
- MS06 HSE MS 06 Emergency Preparedness and Response
- MS07 HSE MS 07 Incident Reporting and Investigation
- MS08 HSE MS 08 Responsibilities and Competencies
- MS09 HSE MS 09 HSE Risk
- MS10 HSE MS 10 HSE Operational Control
- MS11 HSE MS 11 Legal and Other Requirements
- MS12 HSE MS 12 Management of Change
- MS15 HSE MS 15 HSE Assurance
- MS16 HSE MS 16 Control of HSE Records
- MS17 HSE MS 17 Managing Occupational Health & Wellbeing
- MS18 HSE MS 18 Construction Design and Management Green Book

Control Standards

- CS01 HSE CS 01 Working on Electrical Equipment
- CS02 HSE CS 02 Isolation of Services Plant and Equipment
- CS03 HSE CS 03 Lifting Operations and Equipment
- CS04 HSE CS 04 Driving For Work
- CS05 HSE CS 05 Company Organised Events
- CS06 HSE CS 06 Control of Contractors
- CS07 HSE CS 07 Chemicals Management
- CS08 HSE CS 08 Waste Management
- CS09 HSE CS 09 Explosive Atmospheres
- CS10 HSE CS 10 Explosives
- CS11 HSE CS 11 Substances Hazardous to Health
- CS12 HSE CS 12 Legionella
- CS13 HSE CS 13 Permit to Work
- CS14 HSE CS 14 Asbestos
- CS15 HSE CS 15 Working in Confined Spaces
- CS16 HSE CS 16 Visiting Sites
- CS18 HSE CS 18 Field Operations
- CS19 HSE CS 19 Fire Safety Management
- CS20 HSE CS 20 Compressed Gases

- CS21 HSE CS 21 Hazardous Substances
- CS23 HSE CS 23 Transportation of Dangerous Goods
- CS24 HSE CS 24 Pressure Systems
- CS25 HSE CS 25 Hydraulic Systems
- CS26 HSE CS 26 Ergonomics
- CS27 HSE CS 27 Racking Installations
- CS28 HSE CS 28 Resource Use & Efficiency
- CS29 HSE CS 29 Engineering Inspections
- CS30 HSE CS 30 Working at Height
- CS31 HSE CS 31 Water, Effluent and Site Drainage
- CS32 HSE CS 32 HSE for Visitors
- CS33 HSE CS 33 Metal Working Fluids
- CS34 HSE CS 34 Thermal Stress
- CS35 HSE CS 35 Emissions to Air
- CS36 HSE CS 36 Medical Emergency Response
- CS37 HSE CS 37 Work Equipment
- CS38 HSE CS 38 Working On or Near Water
- CS39 HSE CS 39 Ionising Radiation
- CS40 HSE CS 40 Lone Working
- CS43 HSE CS 43 Molten Metals
- CS44 HSE CS 44 Stored Electrical Energy

- CS45 HSE CS 45 Noise at Work and Hearing Conservation
- CS46 HSE CS 46 EMF
- CS47 HSE CS 47 Cycling During Work
- CS48 HSE CS 48 Office Working
- CS49 HSE CS 49 Pressure Testing Systems
- CS51 HSE CS 51 Personal Protective Equipment
- CS54 HSE CS 54 Process Safety
- CS56 HSE CS 56 Powered Lift Truck Vehicles and Mobile Elevating Work Platforms
- CS61 HSE CS 61 Vibration HAVs
- CS65 HSE CS 65 Workplace Transport
- CS67 HSE CS 67 External Complaints and Neighbourhood Issues



To view the full interactive guide visit: www.hseguide.online

HSE & Technical content provided by Darreth Crane (RR). HSE Guide design & development by Studiowide.