SMSTS revision notes

Original independent study material · 21 topics · Reviewed 12 November 2026

Learn the principles behind site management decisions, then practise applying them. Choose a topic for clear notes, a worked example and questions that explain every answer.

Use these original notes and practice questions alongside your taught course and current delegate materials. They are not official CITB exam questions, an exam prediction or a substitute for attendance. The safety guidance is for Great Britain; Northern Ireland has separate legislation. All worked situations are fictional learning examples.

Choose a topic

1. Health and safety law and CDM duties
2. Construction planning and Plan, Do, Check, Act
3. Risk assessment, controls and method statements
4. Competence, induction and worker engagement
5. Inspection, audit, investigation and RIDDOR
6. COSHH, dust, fumes and lead
7. Asbestos information and training limits
8. Noise and vibration: values, exposure and controls
9. Manual handling and work design
10. Welfare, fatigue, stress and wellbeing
11. Work at height, access and fall protection
12. Site layout, traffic and mobile plant
13. Lifting operations and equipment examinations
14. Work equipment, guards and safe maintenance
15. Electrical safety and buried or overhead services
16. Excavation planning, support and inspections
17. Temporary works, demolition and structural stability
18. Confined-space recognition, entry and rescue
19. Fire prevention and emergency planning
20. Environmental controls, waste and pollution
21. Lone work, out-of-hours tasks and driving

1. Health and safety law and CDM duties

Distinguish legal duties, management job titles and the purpose of enforcement notices.

What you should understand

- Distinguish legal duties, management job titles and the purpose of enforcement notices.
- Explain the worked example and check your understanding with the questions.

The Health and Safety at Work etc Act 1974 sets the general framework for workplace health and safety in Great Britain. Employers have duties towards employees and people affected by their work. Employees also have responsibilities: taking reasonable care and cooperating with their employer are part of safe working. A business does not remove its duties by buying an insurance policy or appointing an adviser. [HSE01]

CDM 2015 adds construction-specific responsibilities. The commercial client arranges suitable management, time, resources and appointments. Designers consider foreseeable risks in their designs. Where more than one contractor is involved, the principal designer coordinates health and safety in the pre-construction phase; the principal contractor coordinates it during construction. Contractors still manage their own work. A site manager often implements these arrangements, but that job title does not automatically identify the statutory dutyholder. Ask which organisation holds the duty and what authority has been delegated. [HSE03]

An improvement notice concerns a legal breach that is continuing or likely to recur and sets a period for remedy. A prohibition notice addresses an activity involving a risk of serious personal injury; it can take effect immediately or at a specified later time. An injury does not have to happen first. Knowing the distinction helps you recognise why an unsafe activity cannot be justified by a promised future fix. [HSE02]

These legal notes concern Great Britain. Northern Ireland has its own framework, including CDM (Northern Ireland) 2016. Apply the rules for the project location. [NI01]

Criminal enforcement and civil compensation are different routes. A regulator can act on a legal breach; an affected person may pursue compensation through civil law. Paying an insurance claim does not itself resolve the preventive duty. Relevant duties also apply to self-employed people, and employees must take reasonable care and cooperate with necessary safety arrangements. [HSE49] [LAW02]

Key points to remember

- A job title and a statutory dutyholder role are different things.
- The principal contractor coordinates construction-phase interfaces between contractors.
- A prohibition notice does not require an accident to have occurred.

Know these terms

Dutyholder: A person or organisation on whom the applicable law places a responsibility.

Principal contractor: The appointed contractor coordinating the construction phase on a project involving more than one contractor.

Two contractors, one interface

A fit-out contractor needs ceiling access while another installs services below it. Both say their own method is safe.

Why it matters: The contractors must coordinate their work, and the principal contractor must manage the construction-phase interface. The manager should resolve the sequence and shared controls through those arrangements. Checking two separate documents cannot prove the simultaneous operation is safe.

Common misunderstanding: The site manager personally becomes every CDM dutyholder.

Remember: Establish the actual appointments and delegated tasks. Several organisations retain their own duties.

Recall it without looking

Who coordinates construction-phase health and safety on a multi-contractor project?

The principal contractor, working with the contractors and other dutyholders; each contractor still manages the work under its control.

Primary references: HSE01, HSE02, HSE03, NI01, HSE49, LAW02. See the source list at the end.

2. Construction planning and Plan, Do, Check, Act

Explain how a construction phase plan becomes a working management system.

What you should understand

- Explain how a construction phase plan becomes a working management system.
- Explain the worked example and check your understanding with the questions.

A construction phase plan (CPP) sets out how health and safety will be managed during the work. It is required before the construction phase of every construction project, including work that is not notifiable. The principal contractor prepares it on a multi-contractor project; the sole contractor does so on a single-contractor project. Its detail should fit the work. A short project still needs usable arrangements, not a large borrowed document with irrelevant sections. [HSE04]

Think of the CPP as project coordination: access, welfare, emergency arrangements, interfaces, responsibilities and rules. A task method explains how a particular job is carried out. The health and safety file has a different purpose again: information needed for later work on the structure. Copying a method into a folder does not settle how several contractors will share a work area. [HSE03] [HSE07]

Plan, Do, Check, Act describes a continuing management cycle. Plan identifies priorities, controls and ownership. Do provides resources, competence and implementation. Check compares what actually happens with the intended arrangement. Act uses the findings to correct problems and improve the system. A signed policy is a statement of intent; it is not evidence that a barrier was installed or an action completed. [HSE05]

A practical management note names the decision, responsible person, deadline and verification. For example: move the delivery slot before scaffold dismantling starts, notify both contractors, inspect the separated area and confirm the new route. This makes an assumption visible and gives the manager something observable to check.

Turn the plan into decisions people can follow

A useful CPP connects the project programme with the conditions needed for work to happen. For each significant interface, ask what must be ready, who will arrange it, who needs the information and how the arrangement will be checked. Put the project-wide decision in the CPP and related coordination arrangements; put the detailed task sequence in the relevant contractor's method. The two must agree. Repeating the same vague instruction in both documents does not make it more effective. [HSE04] [HSE07]

Worked reasoning: the next phase changes access

In this fictional planning exercise, façade repairs and deliveries were programmed for different days. A delay now puts them together beside the only pedestrian entrance. Both contractors have current methods, but neither addresses the new overlap.

1. **Plan:** identify the shared area and everyone affected. Compare resequencing with a suitably assessed alternative access arrangement. Agree who makes the coordination decision before accepting the revised programme.
2. **Do:** provide the chosen resources and physical arrangements, update the relevant information and brief both teams and incoming drivers.

3. **Check:** observe the entrance during the actual delivery period. A photograph of an empty route before the shift does not show whether the arrangement works when people and vehicles arrive.
4. **Act:** if people still have to improvise a route, resolve the cause and revise the arrangement. Assign and verify the corrective action instead of recording the same observation each day.

For revision, a useful action record would name the access problem, the agreed change, its owner, the time it must be ready and the evidence needed to close it. The owner may coordinate specialist input rather than personally design the solution. A revised drawing is evidence of a proposed arrangement; checking the installed arrangement and communicating it complete different parts of the job. [HSE05]

Key points to remember

- A CPP is required for every construction project.
- Project coordination, task methods and the health and safety file serve different purposes.
- Checking implementation is part of management, not an optional final stage.

Know these terms

CPP: Construction phase plan: the project's construction-phase health and safety arrangements.

Verification: Checking evidence that an intended action or control actually works.

A plan that stops at the drawing

A revised plan shows a new pedestrian route, but deliveries have already started and no barriers have moved.

Why it matters: The planning stage has changed but implementation has not. The manager needs an owner and resources for the physical change, instructions for affected users and a check before relying on the route. Circulating the drawing alone does not complete the management cycle.

Common misunderstanding: Only projects notified to HSE need a CPP.

Remember: Notification thresholds and the requirement for a CPP are different tests. Every construction project requires a proportionate plan.

Recall it without looking

Give one example of Check and one of Act.

Check: observe whether deliveries follow the agreed separation. Act: change the arrangement and close the cause of repeated pedestrian diversions.

Two current contractor methods are individually suitable, but their activities now overlap. What should the manager resolve before accepting the revised programme?

Identify the shared space, timing and people exposed; agree a coordinated sequence or suitable separation; establish responsibilities and resources; update and brief the affected arrangements; and verify that they work. The missing decision concerns the interface between the methods, not whether each has a signature.

A photograph shows the new pedestrian route before deliveries begin. What further evidence would make the Check stage meaningful?

Observe the route under the conditions it was designed for: deliveries, pedestrian use and any adjacent work. Check that access remains available and people understand it. Compare those observations with the planned arrangement and assign action where they differ.

Improve the action "access to be sorted" without inventing a technical design.

State the affected location and conflict, identify who will coordinate the decision and any competent input, set when the arrangement must be ready, name the people to brief and specify how completion will be verified. Keep any unresolved design or suitability decision open until the appropriate person resolves it.

Primary references: HSE04, HSE03, HSE07, HSE05. See the source list at the end.

3. Risk assessment, controls and method statements

Explain hazard, risk, the control hierarchy and how to review a task method.

What you should understand

- Explain hazard, risk, the control hierarchy and how to review a task method.
- Explain the worked example and check your understanding with the questions.

A hazard is something capable of causing harm. Risk combines the likelihood of harm with its possible severity. A blade is a hazard; risk depends on matters such as access to it, the work, who is exposed and the safeguards. An assessment identifies hazards, people affected, existing controls and further action. It must include non-routine work and people beyond the immediate crew, such as cleaners or visitors. [HSE06]

Start with prevention: can the task or hazardous material be removed, replaced or redesigned? Engineering and collective controls reduce reliance on repeated individual decisions. Procedures, training and PPE remain important but should not become an automatic first answer when a more effective control is practicable. A safety talk about falling objects cannot perform the job of separating people from the danger area. [HSE25] [HSE30]

A method statement translates the chosen controls into a workable sequence. Read it against today's location, equipment, competence, neighbouring activities and emergency arrangements. A generic signature page does not reveal a missing interface. Likewise, a permit-to-work system controls authorisation and coordination for specified work; it does not replace assessment or make the underlying task safe by itself. [HSE07]

Review when the work or assumptions change, controls fail, or experience reveals a gap. Waiting until an annual review date is wrong if the material or method changes today. In the review, identify exactly what changed and what decision is needed; this is more useful than repeatedly writing "RAMS to be updated".

Review a method by following the work

Read a proposed method as though the team is moving through the task. At each stage, identify who could be harmed, what prevents the harm and whether that measure can actually be provided. Include setup, normal work, interruptions, cleaning and handover. A list of hazards is incomplete if it never explains how the controls fit into the sequence. [HSE06] [HSE07]

- **Match:** does the method describe this task, location, equipment and surrounding activity?
- **Challenge:** has avoiding the hazard or changing the process been considered before relying on individual protection?
- **Resource:** are the necessary people, competence, equipment and space available?
- **Verify:** what must be checked before starting, and how will control failures be recognised?
- **Review:** who deals with a change, and how does the revised decision reach the people doing the work?

Worked reasoning: a control that is only a sentence

A contractor's fictional method says "keep other trades clear" during overhead installation. Another team must use the area below to reach its workplace. The hazard is falling material; the risk includes injury to people who need that route. The phrase has not established a workable exclusion or alternative access.

A stronger review asks whether the activities can be separated in time, or whether a suitable protected arrangement can be provided through competent planning. It establishes the work boundary, access arrangements, person coordinating the interface and checks before and during the task. The manager should be able to explain why the chosen arrangement addresses the exposed people. Extra PPE or a second signature does not answer the unresolved access question. [HSE25]

Residual risk is the risk with the actual controls in place. Do not lower a score because a proposed barrier has been written into the assessment but has not yet been installed. If a control cannot be delivered, revisit the method and decision; a reassuring number cannot make the missing measure real.

Key points to remember

- Hazard describes potential harm; risk considers likelihood and severity.
- Prefer eliminating or reducing exposure at source before relying on PPE.
- A changed process can require immediate review even when the document is in date.

Know these terms

Residual risk: Risk remaining after the specified controls are in place.

RAMS: Common shorthand for risk assessments and method statements; the documents have related but different jobs.

The same paint, a different process

A contractor switches from brushing a coating to spraying it in a smaller room. The product is unchanged.

Why it matters: The process and exposure conditions have changed. Spraying can alter airborne exposure, ventilation needs, ignition risks and who is affected. The product sheet is an input; it cannot establish that the previous task controls fit the new work. Review the actual application before authorising it.

Common misunderstanding: A signed assessment is proof that the task is safe.

Remember: It records a decision; its assumptions, implementation and effectiveness must match the real task.

Recall it without looking

Why is a method statement different from a risk assessment?

The assessment identifies harm and controls; the method explains the planned sequence for applying those controls to the work.

A method says “exclude other trades”, but another trade must cross the work area. Name the decisions missing from the method.

It needs a workable sequence or separation, the affected boundaries and access route, coordination with the other trade, responsibility for implementing the arrangement, and checks that it remains effective. First consider whether the overlap can be avoided. Repeating the exclusion instruction does not solve the conflicting access need.

A risk assessment rates the residual risk as low because a barrier is planned. The barrier is unavailable. Can the work be accepted on that rating?

No. The rating depends on a control that is not present. Establish a suitable alternative or revise the work through the appropriate assessment and coordination process. The manager must verify actual controls before relying on the residual-risk conclusion.

The main operation is well controlled, but the method ends before cleaning and handover. What should your review ask?

Ask who performs those stages, who else is present, what hazards remain or are created, what controls and equipment are needed, and who confirms the area is suitable for its next use. A safe production step does not establish that the full operation has been assessed.

Primary references: HSE06, HSE07, HSE14, HSE25, HSE30. See the source list at the end.

4. Competence, induction and worker engagement

Match training and supervision to the task, and check whether safety information is understood.

What you should understand

- Match training and supervision to the task, and check whether safety information is understood.
- Explain the worked example and check your understanding with the questions.

Competence is specific to the work: relevant skills, knowledge, training and experience must fit the task, with suitable organisational capability where needed. A card or certificate is evidence to consider, not a universal licence to operate every machine or supervise every specialist activity. Equipment training may be provided in house when it is suitable; its quality and relevance matter more than the label alone. [HSE09]

Induction explains the arrangements for this site: routes, restricted areas, welfare, emergency signals, reporting, significant risks and relevant rules. It must suit the person's role and needs. Visitors may need a proportionate briefing and escort; workers need the information required for their activities. A returning worker may still need an update when the layout or risks change. [HSE08]

Communication has a receiver. Use clear language, suitable translations or visual demonstrations where appropriate, then ask people to describe or show the important steps. "Do you understand?" often produces a nod without revealing uncertainty. A useful check asks, for example, where a delivery driver waits or how a worker reports a failed control. [HSE08]

Leadership affects whether concerns are raised early. Invite workers to identify practical obstacles and involve them in finding workable controls. Consultation is a two-way process: explaining an already fixed decision is not the same as listening before it is finalised. Supervisory arrangements should reflect experience, complexity and risk; an unfamiliar task may need closer support even for an experienced worker. [HSE10]

Read the meaning as well as the colour

Safety signs communicate a specific message. They support risk controls and do not replace a barrier, safe method or briefing. Read the pictogram and any text, not colour alone. [HSE50]

Sign family	Typical form	Purpose
Prohibition	Red ring and diagonal bar	An action must not be taken, such as no unauthorised entry.
Warning	Yellow triangle	A hazard requires attention, such as electricity.
Mandatory	Blue circle	A specified action is required.
Emergency escape or first aid	Green square or rectangle	Locates an escape route or relevant facility.
Fire equipment	Red square or rectangle	Locates firefighting equipment.

Key points to remember

- Competence relates to a task and its conditions.
- Induction is site-specific and must be understood.
- Worker consultation can reveal problems that paperwork misses.

Know these terms

Induction: An introduction to the arrangements and significant risks relevant to this site and person.

Check-back: Asking someone to explain or demonstrate the important information in their own words.

A familiar machine with a new attachment

An operator is experienced with the base machine but has not used the attachment delivered today.

Why it matters: Assess the additional knowledge and practical skill needed for this configuration. Provide suitable instruction, familiarisation and supervision, and verify capability before use. Experience with the base machine does not establish understanding of the attachment's different controls or limitations.

Common misunderstanding: A signed attendance sheet proves understanding.

Remember: It records attendance. Use a practical explanation or demonstration to check understanding.

Recall it without looking

Give a stronger question than "Do you understand the emergency procedure?"

Ask the person to identify the alarm, their route and assembly point, and explain how they would raise a concern.

Primary references: HSE09, HSE08, HSE10, HSE50. See the source list at the end.

5. Inspection, audit, investigation and RIDDOR

Use monitoring to prevent harm and separate internal learning from statutory reporting.

What you should understand

- Use monitoring to prevent harm and separate internal learning from statutory reporting.
- Explain the worked example and check your understanding with the questions.

An inspection examines conditions and controls: for example, whether an access route remains usable. An audit takes a broader look at whether the management system is suitable and being followed, including evidence that inspections lead to completed actions. Both need reliable records. A finding should describe the condition, risk, required action, owner and follow-up; a tick without supporting observation is weak evidence. [HSE05] [HSE07]

After an incident, the priorities include help, preventing further harm and preserving useful information when it is safe to do so. Investigation should look beyond the last action of the person involved. Immediate causes explain what happened; underlying causes can include poor planning, unsuitable equipment, unclear instructions or programme pressure. Corrective action should address those causes and be checked for effectiveness. A near miss can reveal the same failing as an injury event. [HSE11]

RIDDOR is a separate statutory reporting process. In Great Britain, work-related deaths, specified injuries, certain dangerous occurrences, qualifying occupational diseases and other defined events can be reportable. Not every accident or near miss meets the test. The responsible person depends on the circumstances; “site manager” is not automatically the answer. [HSE13]

Most reportable accident and dangerous-occurrence categories require notification without delay and a report within ten days. An over-seven-day worker-incapacity report must be sent as soon as practicable and within fifteen days of the incident; the accident day is excluded from the incapacity count, while weekends and rest days count. Occupational disease reporting follows receipt of the qualifying diagnosis. These are GB rules; use the separate Northern Ireland system where applicable. [HSE12] [HSE13] [LAW03]

Keep different records for their actual purposes. A construction-phase plan describes project arrangements; a scaffold inspection report records an inspection; a lifting thorough-examination report addresses the equipment examined; and a RIDDOR report fulfils a qualifying reporting duty. Some projects also require notification to HSE. Check the applicable requirement and retention arrangements rather than assuming one generic checklist replaces every statutory record. [HSE07]

Classify the event before choosing the reporting route

For a GB RIDDOR decision, record the event, whether it arose from work, the person's status, the injury or diagnosis and any period during which normal duties could not be performed. Check the relevant category with the responsible person. Do not use the number of days off as the first and only test: a specified injury has its own reporting route. [HSE13]

Worked reasoning: two injuries, different tests

In the first fictional case, an employee sustains a doctor-confirmed wrist fracture in a work-related accident. That falls within the specified-fracture category; the responsible person should not wait to see whether absence exceeds seven days. Follow the notification and reporting requirements for that category. [HSE13] [HSE12]

In the second case, an employee has an otherwise non-specified injury from a work-related accident on a Monday. They remain unable to perform their normal duties from Tuesday through the following Tuesday. The accident Monday is excluded. Tuesday is day one; the weekend still counts; the following Monday is day seven and Tuesday is day eight. This exceeds seven consecutive days, even if some days were rest days or the worker attended for different duties. The reporting deadline is measured from the incident, not from day eight or the eventual return to normal work. [LAW03] [HSE12]

Keep prevention moving while facts are established

A pending diagnosis or reporting decision is not a reason to delay immediate protection or the collection of reliable facts. Record the known information, identify who will obtain what is missing and keep the classification under review. For an internal investigation, distinguish what happened from why the work allowed it to happen. Link each corrective action to a cause and verify the result. A new briefing can address misunderstanding; it cannot by itself provide a missing storage area or repair defective equipment. [HSE11]

Key points to remember

- Investigation, corrective action and statutory reporting are separate tasks.
- A near miss can justify learning even when it is not RIDDOR-reportable.
- Check the actual reporting category, responsible person and deadline.

Know these terms

Underlying cause: A system or organisational failing that helped the immediate event occur.

Dangerous occurrence: A defined category of serious event under RIDDOR, not a synonym for every near miss.

The repeated blocked walkway

A worker trips after deliveries repeatedly occupy a walkway. The action proposed is “remind staff to look where they walk”.

Why it matters: That response focuses on the final action and misses why materials arrive where people must walk. Examine storage space, delivery planning, route protection, ownership and earlier reports. Then verify the revised arrangement. Decide statutory reporting separately using the injury and work-related facts.

Common misunderstanding: Writing an accident-book entry completes RIDDOR.

Remember: The internal record and statutory notification are different processes.

Common misunderstanding: No injury means no useful investigation.

Remember: A high-potential near miss can reveal a control failure before harm occurs.

Recall it without looking

What is one underlying cause of a vehicle-pedestrian near miss?

For example, a delivery schedule and site layout that repeatedly force people into a vehicle route. This goes beyond blaming the last person who stepped there.

A doctor confirms a worker's wrist fracture after a work-related accident. The worker expects to return tomorrow. Should the responsible person wait for an eight-day absence?

No. The specified-injury category must be considered independently of the over-seven-day incapacity test. The expected return date does not remove that category. Follow its notification and reporting requirements using the confirmed facts.

An otherwise qualifying worker injury occurs on Monday. The worker cannot perform normal duties from Tuesday through the next Tuesday, including the weekend. Count the relevant period.

Exclude the accident Monday. Tuesday is day one, the weekend counts, the following Monday is day seven and the next Tuesday is day eight. The period exceeds seven consecutive days. Use the incident date for the reporting deadline; do not start a new fifteen-day clock on day eight.

An investigation finds repeated walkway obstructions, but the proposed action is a reminder to watch where people walk. What would make the response more useful?

Establish why materials repeatedly occupy the route, including delivery timing, storage, responsibilities and previous unresolved reports. Assign actions addressing those causes and verify the route during the relevant activity. Keep this prevention work separate from deciding whether the particular event meets a RIDDOR category.

Primary references: HSE05, HSE07, HSE11, HSE12, HSE13, LAW03. See the source list at the end.

6. COSHH, dust, fumes and lead

Explain exposure routes and choose controls that fit the substance and process.

What you should understand

- Explain exposure routes and choose controls that fit the substance and process.
- Explain the worked example and check your understanding with the questions.

Hazardous substances include more than labelled containers. Cutting creates dust; welding creates fumes; mixing or applying products can release vapours or mist. Exposure can occur by breathing, skin or eye contact, swallowing contamination, or entry through damaged skin. A COSHH assessment considers the actual substance, process, quantity, duration, people exposed and controls. A safety data sheet supplies information about a product; it is not a completed assessment of your workplace. [HSE14]

Construction dust can damage the lungs. Silica-containing materials, wood and other construction materials produce different dusts; lack of visible dust or immediate symptoms does not establish safe exposure. Consider designing out cutting, ordering suitable sizes or using a less dusty process. Where dust remains, controls may include on-tool extraction or water suppression and suitable respiratory protection where required. Selection, maintenance, training and checking effectiveness all matter. A mask does not repair failed extraction. [HSE15]

Protect the wider work area as well as the operator. For example, an enclosed room may contain another trade, and dusty cleaning can expose people after the main task finishes. Plan storage, cleaning, disposal and emergencies as part of the process. Skin protection and washing arrangements matter where substances can cause dermatitis or burns; preventing inhalation alone may leave other exposure routes open. [HSE14]

Lead is covered by separate lead-at-work requirements. Disturbing old lead coatings, hot cutting or handling contaminated materials can create inhalation and ingestion risks. Dirty hands can transfer lead to food or cigarettes. Identify the material and work, obtain suitable specialist assessment and arrange the required control and health arrangements; ordinary dust precautions are not proof that lead risk is adequately managed. [HSE16]

Where the assessment requires tight-fitting respiratory protective equipment (RPE), arrange a competent face-fit test for the individual wearer and supply the make, model, type and size that achieved a successful fit. A different facepiece cannot be assumed to fit because its protection rating looks similar. The wearer must also put it on correctly and check the fit each time; this user check does not replace the fit test. Hair in the sealing area can prevent a good seal, so consider suitable alternative RPE when a tight face seal cannot be achieved. Check compatibility with other protective equipment and the task. [HSE53]

Separate three kinds of evidence

Checking the control asks whether the intended measure is present and functioning: for example, whether the specified extraction is connected and maintained. **Exposure monitoring** uses suitable measurements to help establish exposure or control effectiveness. **Health surveillance** uses appropriate repeated health checks to identify work-related adverse effects where required. They answer different questions. A normal health result does not prove that today's extraction works, and an equipment label does not show what a person inhaled. [HSE14] [HSE42]

Use competent occupational hygiene or health input to decide what measurements or surveillance are needed and interpret the results. Health surveillance is not a general wellbeing check for everybody. Where medical surveillance is required for lead exposure, the appropriate appointed-doctor arrangements matter. The manager should secure the required provision and act on the advice, rather than invent medical thresholds or personally interpret clinical results. [HSE42]

Worked reasoning: a complete cutting method with an incomplete cleanup plan

In this fictional review, the cutting team has suitable extraction and its RPE arrangements have been checked. The method then says “leave tidy”. A different shift is expected to clean the area, but has received no dust-control information. The omission leaves an exposure stage and a group of people outside the plan.

The manager's review should establish the assessed cleaning and waste method, who will do it, their information and equipment, and how the work area is handed over. Check whether the planned control arrangements actually cover that stage. Do not substitute a health questionnaire or a claim that nobody is coughing for a missing exposure-control method. If old coatings may contain lead, establish the material and the relevant lead-specific assessment and health arrangements before assuming the ordinary cutting method covers it. [HSE15] [HSE16]

Key points to remember

- A product sheet is information for an assessment, not the assessment itself.
- Generated dust and fumes can be hazardous even without a product warning label.
- Exposure controls must cover the process, bystanders and cleanup.

Know these terms

COSHH: Control of Substances Hazardous to Health: the GB framework for managing many hazardous-substance exposures.

Exposure route: How a substance reaches the body, such as inhalation, skin contact or ingestion.

RPE: Respiratory protective equipment selected for the wearer, hazard and task.

The task ends but exposure continues

A cutting task uses extraction. At the end of the shift, another worker dry-sweeps the settled dust through an occupied room.

Why it matters: The main cutting control does not cover the entire exposure pathway. The assessment must consider suitable cleaning, people nearby and waste handling. The manager should arrange a cleaning method that avoids unnecessarily dispersing dust and verify that the team knows and can use it.

Common misunderstanding: No warning label means no COSHH risk.

Remember: Work processes can generate harmful substances that were not supplied in a labelled container.

Common misunderstanding: If nobody coughs, the dust control is effective.

Remember: Symptoms and visibility cannot establish adequate control; some harm develops later.

Recall it without looking

Why can the same product need a different assessment when sprayed instead of brushed?

The process can change airborne exposure, people affected, ventilation, fire risk and the protection needed.

An extraction maintenance record is current and a worker's last health check was normal. What do these records fail to establish about today's task?

Neither alone proves that the actual task controls are suitable and functioning today or that exposure is adequately controlled. Check the process, equipment use, affected people and any required exposure monitoring. Health surveillance and control verification have different purposes.

A dust method names the cutting operator but says nothing about the cleaner on the next shift. What should be added before accepting the complete operation?

The assessed cleaning and waste arrangements, who is exposed, the equipment and instruction needed, coordination with other occupants and a clear handover. The control plan must include later exposure stages as well as the main cutting task.

A subcontractor calls a general annual health questionnaire "lead surveillance". What should management establish?

Whether the work involves lead exposure and what the competent assessment requires, including any required medical surveillance and appropriate appointed-doctor provision. Verify the relevant arrangements and follow competent advice. The label on a general questionnaire does not establish that the lead-specific requirements are met.

Primary references: HSE14, HSE15, HSE16, HSE53. See the source list at the end.

7. Asbestos information and training limits

Choose the information needed before work disturbs a building and recognise the limits of awareness training.

What you should understand

- Choose the information needed before work disturbs a building and recognise the limits of awareness training.
- Explain the worked example and check your understanding with the questions.

Asbestos risk is connected to disturbing asbestos-containing materials and releasing fibres. Before intrusive work, find out whether the information covers the actual areas and materials affected. An asbestos register or report should be read for its scope, exclusions, location information and recommended action. A recent date does not make a report suitable for a different purpose. [HSE17]

A management survey helps manage asbestos during normal occupation and foreseeable maintenance. A refurbishment or demolition survey addresses materials, including hidden materials, in the area affected by intrusive work. The survey must suit the proposed scope. If a wall void is excluded, "no asbestos identified in accessible areas" does not answer what is behind the wall. Resolve that gap before arranging disturbance. [HSE17]

Asbestos awareness training helps people recognise potential risks and avoid disturbing asbestos. It does not train them to sample, remove or work on asbestos. Non-licensed and licensed asbestos work require the appropriate further training, competence and arrangements. Do not use an awareness certificate as the basis for selecting a removal contractor. [HSE18]

A manager should make the relevant information available to those planning and carrying out the work, establish the appropriate specialist arrangements, and explain the procedure if suspect material is encountered. The response must prevent further disturbance and exposure while the material and required action are assessed. Do not ask an untrained worker to break off a sample to settle an uncertainty.

Key points to remember

- Check survey purpose, coverage and exclusions against the planned work.
- Awareness training does not authorise asbestos work.
- Information must reach the people who could disturb the material.

Know these terms

ACM: Asbestos-containing material.

Survey exclusion: An area or material that the survey did not inspect; it remains an information gap for relevant work.

The uninspected service riser

A report covers accessible rooms but excludes a service riser. The refurbishment requires drilling through that riser.

Why it matters: The relevant risk is unresolved, even if the report is recent and most rooms were clear. The planned intrusive work needs suitable information for that area and any required specialist action. Reusing the general report without resolving the exclusion would treat missing information as a negative finding.

Common misunderstanding: A building survey saying “none found” means every hidden area is clear.

Remember: Read its purpose and exclusions. The statement may only concern inspected areas.

Recall it without looking

What can an asbestos-awareness certificate demonstrate, and what can it not demonstrate?

It can evidence awareness training. It cannot establish competence to sample, remove or carry out asbestos work.

Primary references: HSE17, HSE18. See the source list at the end.

8. Noise and vibration: values, exposure and controls

Distinguish action values from limits and understand why duration and the actual equipment matter.

What you should understand

- Distinguish action values from limits and understand why duration and the actual equipment matter.
- Explain the worked example and check your understanding with the questions.

Noise can damage hearing and cause tinnitus. Think about reducing noise at source: a quieter method, suitable quieter equipment, maintenance or separation can reduce exposure before personal hearing protection is added. Assessment must consider the actual work and time exposed; a machine's catalogue figure is not automatically the worker's daily exposure. [HSE19] [HSE45] [LAW01]

For GB daily or weekly noise exposure, the lower action value is 80 dB(A), the upper action value is 85 dB(A), and the exposure limit value is 87 dB(A). The limit takes account of hearing protection; action values are assessed without its reduction. Peak sound pressure also has separate values. These numbers trigger different duties and are not a suggestion to work up to a limit. Suitable assessment, controls, information, protection and health surveillance depend on the circumstances. [HSE19] [HSE45] [LAW01]

Hand-arm vibration can damage nerves, circulation and joints. Tingling, numbness or fingers going white are concerns to report early, not signs to wait for before controlling exposure. The GB daily hand-arm vibration action value is 2.5 m/s^2 A(8); the limit is 5 m/s^2 A(8). A(8) expresses exposure normalised to an eight-hour reference period: it is not the same as using a tool for eight hours. [HSE20] [HSE46] [HSE47]

Exposure depends on vibration magnitude and the time actually exposed across the relevant tools. A lower-vibration tool used much longer may not reduce daily exposure as expected. Plan the operation, use representative information, maintain tools and limit exposure appropriately. Health surveillance can identify early effects for relevant risks, but does not replace controlling the exposure. [HSE42]

Keep the noise measurements separate

Value	Daily or weekly exposure	Peak sound pressure
Lower action value	80 dB(A)	135 dB(C)
Upper action value	85 dB(A)	137 dB(C)
Limit value	87 dB(A)	140 dB(C)

The daily or weekly measurement and peak measurement answer different questions. Hearing-protection reduction is considered for the limit values, not the action values. Weekly averaging is permitted in the circumstances specified by the regulation; it is not an automatic choice for every task. [LAW01]

Key points to remember

- Action values trigger action; they are not safe targets.
- Noise exposure depends on level and duration.

- Vibration exposure includes contributing tools and actual exposure time.

Know these terms

dB(A): An A-weighted decibel measure used for noise exposure.

A(8): Daily vibration exposure expressed over an eight-hour reference period.

Health surveillance: Checks intended to detect early work-related ill health for relevant risks.

A quieter tool used for longer

A replacement breaker has a lower declared vibration magnitude, but its slower performance doubles the expected exposure time.

Why it matters: The daily exposure needs assessment using appropriate data and the revised duration. Choosing the lower declared figure alone is not enough. Compare the entire operation, including alternative methods, actual use and maintenance, then verify the assumptions in practice.

Common misunderstanding: Below the exposure limit means no action is needed.

Remember: Action values and other duties can require controls before the limit is reached.

Common misunderstanding: Shift length is the same as vibration trigger time.

Remember: Exposure time concerns actual vibration exposure, not simply hours on site.

Recall it without looking

What do the hand-arm vibration values 2.5 and 5 m/s^2 A(8) represent?

Respectively the daily exposure action value and exposure limit value in Great Britain; neither is a universal safe tool-use time.

Primary references: HSE19, HSE20, HSE42, LAW01, HSE45, HSE46, HSE47. See the source list at the end.

9. Manual handling and work design

Assess the whole handling operation and explain why weight alone is not enough.

What you should understand

- Assess the whole handling operation and explain why weight alone is not enough.
- Explain the worked example and check your understanding with the questions.

Manual handling includes lifting, lowering, carrying, pushing and pulling. The first planning question is whether a hazardous handling operation can be avoided. Delivery location, component size, mechanical assistance and sequence can prevent a difficult movement from becoming part of the job. Training in lifting technique is useful but cannot correct an operation that is fundamentally unsuitable. [HSE21]

Where hazardous handling remains, consider the task, individual capability, load and environment. Frequency, reach, twisting, carrying distance, grip, stability, visibility, floor condition and available space can matter as much as mass. A bulky lightweight board can obstruct vision or be difficult to control outdoors. A small load repeatedly moved at arm's length can create strain over time. [HSE21]

A mechanical aid must fit the route and load. A trolley may reduce carrying but introduce pushing, pulling, slopes, pinch points or a need to restrain the load. Confirm suitable equipment, access and competence before choosing the aid. Changing where materials arrive can sometimes achieve more than asking the workforce to lift differently. [HSE30]

There is no single legal maximum lifting weight that makes every operation safe. A team lift also needs assessment: load sharing may be uneven, people must coordinate, and the route can restrict movement. Involve the people doing the work and review arrangements if packages, storage height, frequency or personnel change. A recorded assessment should make the important assumptions visible.

Key points to remember

- Avoid hazardous handling where practicable before assessing what remains.
- Consider task, individual, load and environment together.
- A trolley changes the handling risks; it does not automatically remove them.

Know these terms

Manual handling: Moving or supporting a load using bodily force, including pushing and pulling.

Ergonomics: Designing work and equipment to fit people and reduce avoidable strain.

Delivery to the wrong floor

Boxes arrive at ground level and must be repeatedly carried upstairs. The proposed control is a lifting-technique talk.

Why it matters: First review whether delivery, storage or suitable mechanical movement can avoid the repeated carry. If handling remains, assess the load, stairs, frequency, people and rest of the operation. The talk may support the eventual method but cannot remove the stair-carry exposure by itself.

Common misunderstanding: Any load below a remembered weight is safe.

Remember: Weight is one factor; posture, frequency, distance, grip and the person can change risk substantially.

Recall it without looking

Name four features besides weight that can change handling risk.

For example, carrying distance, frequency, twisting or reach, and floor condition. Grip, load stability and individual capability also matter.

Primary references: HSE21, HSE30. See the source list at the end.

10. Welfare, fatigue, stress and wellbeing

Plan usable welfare and recognise how work organisation affects health and performance.

What you should understand

- Plan usable welfare and recognise how work organisation affects health and performance.
- Explain the worked example and check your understanding with the questions.

Construction welfare includes toilets, washing, drinking water, changing and rest arrangements appropriate to the work. It needs to be available from the start and maintained throughout the project. Plan access, capacity, cleaning, replenishment and faults. A facility on a drawing is not sufficient if it is locked during the shift or cannot be reached safely. Contractors provide suitable welfare for their workers; the principal contractor coordinates provision on a multi-contractor site and the client must ensure arrangements are made. [HSE22]

Occupational health management also addresses how work is organised. Fatigue can be affected by long shifts, insufficient recovery, demanding work and travel. A manager should examine schedules and workload when planning an evening or extended shift, including whether supervision, lighting, welfare and emergency cover remain available. An instruction to "stay alert" cannot provide missing recovery time. [HSE39] [HSE41]

HSE's stress Management Standards cover demands, control, support, relationships, role and change. These are useful prompts for identifying work-related pressures: impossible workloads, conflicting instructions or badly communicated changes can be addressed through management action. Consult workers, identify causes and agree practical improvements. A wellbeing poster alone does not reduce an unachievable workload. [HSE23]

Concerns about mental health, drugs or alcohol need a respectful, consistent response under the employer's arrangements. Address immediate safety and offer appropriate support; a change in behaviour is not proof of a diagnosis or substance misuse. Keep personal information appropriately restricted and use qualified support for health decisions. [HSE24]

Key points to remember

- Welfare must work for the actual shifts and workforce.
- Fatigue and stress can have causes in workload and work organisation.
- Observe facts and address safety without guessing a medical diagnosis.

Know these terms

Welfare: Facilities and arrangements supporting basic needs such as washing, drinking, changing and rest.

Work-related stressor: An aspect of work design or organisation that can contribute to harmful pressure.

The evening shift loses its facilities

A project extends into the evening, but the welfare cabin and first-aid arrangements finish at the normal closing time.

Why it matters: The altered shift needs its own workable arrangements. Resolve access to suitable welfare and emergency support, then check workload, fatigue, lighting and supervision. The daytime plan does not automatically cover the extended operating period.

Common misunderstanding: A small or short job is exempt from welfare planning.

Remember: Suitable arrangements are still needed; the provision should fit the work and workforce.

Recall it without looking

Name three management changes that could reduce work-related stress.

For example, make workloads achievable, clarify conflicting roles, and provide support and clear communication during changes.

Primary references: HSE22, HSE23, HSE24, HSE39, HSE41. See the source list at the end.

11. Work at height, access and fall protection

Apply the work-at-height hierarchy and distinguish prevention, restraint and arrest.

What you should understand

- Apply the work-at-height hierarchy and distinguish prevention, restraint and arrest.
- Explain the worked example and check your understanding with the questions.

Work at height includes a place where a fall could cause injury; it is not restricted to work above two metres. The planning order is to avoid work at height where practicable, prevent falls where it cannot be avoided, and reduce the distance and consequences of any remaining fall risk. Consider collective protection, such as suitable guardrails, before protection that depends on each person connecting equipment correctly. [HSE25]

Access equipment must suit the task, duration, loads, ground or supporting conditions and environment. A ladder is not automatically prohibited, but it should only be chosen when the assessment justifies its use for the task; short duration alone does not settle all the risks. Plan safe access and movement, fragile surfaces, openings, falling objects and effects on people below. [HSE43] [HSE48]

Scaffolds require suitable design, erection, alteration and inspection arrangements. HSE guidance calls for competent inspection after installation and before first use, at intervals not exceeding seven days, and after circumstances that could jeopardise safety. Competence must match the scaffold's type and complexity. An inspection record from before a damaging event cannot establish its condition afterwards. Unauthorised alterations can invalidate the arrangement. [HSE26]

Work restraint prevents a person reaching a fall position. Fall arrest acts after a fall begins and therefore requires suitable anchors, compatibility, clearance and a planned rescue. A harness by itself is not a complete system. Management planning must make the rescue practicable with appropriate people and equipment; relying only on calling emergency services does not establish a suitable rescue arrangement. [HSE25]

A protected platform can prevent a fall without each worker attaching a personal system. Restraint is a personal prevention measure; arrest limits a fall after it begins. These are different positions in the hierarchy, so a question about preventing a fall should not be answered as though arrest stops the person reaching the edge. [HSE52] [HSE51]

Choose access by the work it must support

The equipment decision follows the task and hierarchy, not what happens to be available. Establish the working position, reach, duration, tools and materials, supporting conditions and people below. Include getting to and from the working position and any rescue needed. Compare the options before settling the method. [HSE25] [HSE52]

- **Ladder or stepladder:** justify it through the assessed risk and conditions of use. A short task is not automatically a suitable ladder task, especially if the working position cannot be maintained safely.
- **Tower or scaffold platform:** establish suitability for the work, space and loads, together with competent assembly or erection, inspection and safe access. A platform is not ready merely because its components have arrived.

- **MEWP:** select a suitable machine for the task and location, with competent use and workable emergency arrangements. Its reach alone does not answer every suitability question.
- **Personal fall protection:** explain why higher levels of protection are not reasonably practicable and identify the complete system. A harness on an equipment list does not establish anchors, clearance, compatibility or rescue.

These are comparison prompts rather than instructions for erecting or operating access equipment. Use the relevant competent planning and equipment information. [HSE48] [HSE26] [HSE51]

Worked reasoning: an inspection platform becomes a storage area

A scaffold was arranged for inspection work. A later team proposes storing its materials on the platform to save handling time. An in-date inspection report does not establish that the new loading and use fit the scaffold's design. The manager should identify the proposed change, obtain the scaffold provider's competent assessment and coordinate any necessary alterations and inspection before relying on the new arrangement. The same principle applies when proposed sheeting or other additions change the assumptions used for the scaffold. [HSE26]

For a model revision answer, explain both the potential benefit and the unresolved risk. Moving materials closer may reduce carrying, but that improvement cannot justify an unverified platform load. Management must resolve the interaction between controls, rather than treating improvement in one risk as approval of the whole change.

Key points to remember

- Avoid height, prevent falls, then minimise remaining consequences.
- Collective protection generally protects everyone using the area.
- A harness requires a suitable system and rescue arrangements.

Know these terms

Work restraint: A system preventing the user from reaching a position where a fall could occur.

Fall arrest: A system intended to stop a fall after it has started.

Collective protection: Protection that works for more than one person without each repeatedly taking a specific protective action.

The open edge and the available harness

An open-edge task is planned using a harness because one is already in the store. No anchor or rescue arrangement has been selected.

Why it matters: Start with whether height can be avoided or a suitable protected working platform provided. If personal fall protection is needed, the system requires a suitable design, equipment, anchors, competent use and rescue. Availability of a harness is not a reason to skip the hierarchy or the rest of the system.

Common misunderstanding: Work below two metres cannot be work at height.

Remember: The relevant issue is a fall liable to cause injury, not a universal two-metre threshold.

Common misunderstanding: Any harness prevents a fall.

Remember: A restraint system and an arrest system perform different functions; suitability depends on the full arrangement.

Recall it without looking

How does restraint differ from arrest?

Restraint prevents reaching the fall position. Arrest stops a fall after it starts, so clearance and rescue are essential considerations.

A contractor selects a ladder because each fitting takes only a few minutes. What else should a reasoned selection explain?

Whether height can be avoided, the task risk, working position and reach, the tools and materials, stability and access, and whether equipment offering greater protection is justified. Short duration is one consideration; it does not prove that this task can be performed safely from a ladder.

A scaffold has a current inspection report. A new trade wants to add stored materials and sheeting. Why is checking the date alone insufficient?

The proposed use and loading may differ from the design assumptions, and sheeting can affect the arrangement. Obtain the appropriate scaffold design or provider input, establish any required changes and inspection, and communicate the accepted conditions. The report does not approve every future alteration.

A protected roof edge is present, but the route crosses fragile rooflights. What has the proposed access method failed to address?

It has considered falling from the perimeter without resolving the fall-through hazard on the access route. The competent plan must address the entire journey and working place, including fragile areas, suitable prevention and any remaining rescue needs. Edge protection alone does not make every surface safe to cross.

Primary references: HSE25, HSE26, HSE43, HSE48, HSE51, HSE52. See the source list at the end.

12. Site layout, traffic and mobile plant

Reduce vehicle-pedestrian conflict through layout, movement planning and suitable mobile equipment.

What you should understand

- Reduce vehicle-pedestrian conflict through layout, movement planning and suitable mobile equipment.
- Explain the worked example and check your understanding with the questions.

Site layout determines many later risks. Plan access, boundaries, storage, pedestrian routes, vehicle routes, unloading, welfare and emergency access together. A route must be suitable for the people or vehicles using it, including visitors and drivers unfamiliar with the site. Storage that blocks a walkway can force an unplanned interface with plant. [HSE27]

Keep pedestrians and vehicles apart where possible and reduce unnecessary movements. Delivery timing, one-way arrangements and suitable turning areas can reduce reversing and congestion. Where crossing or reversing cannot be avoided, assess visibility, separation, signals and the competence of anyone directing movements. High-visibility clothing helps someone be seen; it does not remove a blind spot or replace a suitable route. [HSE27]

Mobile plant needs equipment and people suited to the work: appropriate controls, visibility, protection from overturning or falling objects where required, maintained condition and competent authorised use. Check the operating surface, slopes, loads and attachments against the machine's capabilities and planned method. A machine arriving from a hire company still needs checks for this task and site. [HSE30]

Consider the whole movement, not just arrival at the gate. Who confirms the route is clear, where does the driver wait, how does unloading interact with nearby trades, and what stops unauthorised people entering the danger area? A change in delivery time can conflict with overhead work even if the route itself is unchanged. Coordinate the change and verify the physical arrangement before relying on it.

Key points to remember

- Layout and sequencing can remove conflicts before warning people about them.
- High-visibility clothing does not replace suitable separation.
- Mobile equipment must suit the ground, attachment, load and operator.

Know these terms

Segregation: Keeping people and vehicle movements apart through suitable layout or physical measures.

Interface: A point where activities, routes or organisations interact and can affect one another.

Unloading overlaps another trade

A lorry arrives late, when a team is working above the proposed unloading area. Its booking originally assumed the team would be elsewhere.

Why it matters: The original timing assumption has failed. Compare resequencing or a suitable alternative location, then coordinate access restrictions and the unloading method with both parties. A driver briefing supports those controls but cannot remove the overhead-work conflict by itself.

Common misunderstanding: A banksman makes any reversing arrangement safe.

Remember: Avoid or reduce reversing first. Where direction is used, the whole arrangement and competence still need assessment.

Recall it without looking

Name two planning choices that can reduce reversing exposure.

For example, a suitable one-way route or turning area, and delivery planning that avoids congested or obstructed manoeuvres.

Primary references: HSE27, HSE30. See the source list at the end.

13. Lifting operations and equipment examinations

Separate lift planning, ongoing condition checks and thorough examination.

What you should understand

- Separate lift planning, ongoing condition checks and thorough examination.
- Explain the worked example and check your understanding with the questions.

LOLER concerns lifting operations and lifting equipment. Every lifting operation needs planning by a competent person, appropriate supervision and safe execution. The detail depends on complexity and risk. A repeated simple lift may have established arrangements; a complex lift needs more extensive planning. The manager must ensure suitable people and resources are available and coordinate neighbouring activities, without assuming a management qualification makes them the lift planner. [HSE28]

Planning considers the load, equipment and accessories, positioning, ground or supporting conditions, travel path, people exposed and foreseeable changes. A lift plan for a known load does not automatically cover a heavier load, different radius, different attachment or changed location. Establish who can authorise changes and how the operation will be controlled. [HSE28]

Thorough examination is a systematic examination by a competent person with a written report. Unless a competent examination scheme specifies other intervals, regular examination is at six months for equipment used to lift people and lifting accessories, and twelve months for other lifting equipment. Relevant installation and exceptional events can also require examination. These intervals do not replace pre-use checks, maintenance or action on defects. [HSE29]

A current report records a finding at a point in time. It cannot prove an accessory is safe after new damage. Check the identity, purpose, capacity and condition of the actual item, and ensure defects prevent inappropriate use. Treat examination, maintenance and operational checking as complementary activities, each with a different purpose.

Key points to remember

- Lifts require competent planning, appropriate supervision and safe execution.
- Routine examination intervals are subject to a competent examination scheme and other triggers.
- A current examination report does not override later damage.

Know these terms

LOLER: Lifting Operations and Lifting Equipment Regulations 1998 in Great Britain.

Thorough examination: A detailed examination by a competent person, with the required written report.

Lifting accessory: Equipment connecting a load to lifting machinery, such as a sling or shackle.

A sling with fresh damage

A sling's thorough examination is in date, but a worker notices fresh damage while preparing the lift.

Why it matters: The current condition must be dealt with. Prevent use of the affected item and arrange the appropriate competent assessment or replacement through the lifting arrangements. The report does

not approve damage that occurred later, and the site manager should not improvise a repair or accessory substitution.

Common misunderstanding: An in-date examination certificate makes every lift safe.

Remember: The operation still needs suitable planning, people, equipment, conditions and checks.

Recall it without looking

What are the usual six- and twelve-month LOLER intervals for?

Six months for lifting accessories and equipment lifting people, twelve months for other lifting equipment, unless a competent examination scheme sets different intervals; other examination triggers still apply.

Primary references: HSE28, HSE29. See the source list at the end.

14. Work equipment, guards and safe maintenance

Explain PUWER suitability, guarding and the difference between stopping and safe isolation.

What you should understand

- Explain PUWER suitability, guarding and the difference between stopping and safe isolation.
- Explain the worked example and check your understanding with the questions.

PUWER applies to work equipment and to those who provide, control or use it. Equipment must be suitable for its intended task, maintained in a safe condition and used by people with adequate information, instruction and training. The duties can apply to equipment an employer's staff use even when another business owns it. A new machine is not automatically suitable for every environment or attachment. [HSE30]

Protective measures can include guards, interlocks, emergency stops, controls and means of isolation. These do different jobs. A guard prevents access to danger; an emergency stop helps stop a developing emergency. Neither a skilled operator nor a promise to keep hands clear is equivalent to a missing guard. Check the intended protection rather than accepting a workaround that defeats it. [HSE30]

Maintenance introduces different risks from normal operation. Energy can remain in electricity, pressure, springs, raised loads or moving parts after the normal control is switched off. Safe work therefore needs suitable isolation, prevention of unintended restart and control of stored energy, implemented by competent people using the relevant procedure. A stop button is not automatically an isolator. [HSE31]

Management should plan maintenance time, access, competence and handover. Defect reporting must lead to action: label or otherwise control unavailable equipment, prevent unauthorised reuse and establish who confirms return to service. Keep appropriate inspection and maintenance records, but verify the actual equipment and protective measures. Paperwork alone cannot reveal damage that arose after the last check.

Key points to remember

- Suitability, condition and user competence must all match the task.
- Emergency stopping and safe isolation are different functions.
- Maintenance planning must consider stored energy and unintended restart.

Know these terms

PUWER: Provision and Use of Work Equipment Regulations 1998 in Great Britain.

Interlock: A protective arrangement linking access or another condition to machine operation.

Stored energy: Energy remaining in a system, such as pressure, a spring or a raised component.

The jammed machine

A machine jams. The operator presses stop and proposes reaching inside to free the material while someone stands at the control.

Why it matters: Normal stopping does not establish safe maintenance conditions. The relevant competent isolation procedure must control power, unintended restart and stored energy before access. The manager's task is to arrange and verify that process, not to improvise an isolation method for equipment they do not understand.

Common misunderstanding: Pressing stop is the same as isolating the machine.

Remember: It may stop normal movement without disconnecting energy or preventing restart.

Recall it without looking

Name two forms of stored energy besides electricity.

For example, hydraulic or pneumatic pressure, a compressed spring, a rotating flywheel or a raised load.

Primary references: HSE30, HSE31. See the source list at the end.

15. Electrical safety and buried or overhead services

Use service information and competent electrical arrangements without treating plans or switches as proof of safety.

What you should understand

- Use service information and competent electrical arrangements without treating plans or switches as proof of safety.
- Explain the worked example and check your understanding with the questions.

Electrical danger includes shock, burns, fire and effects of arcing. Work on or near electrical systems needs suitable planning and competence. Management must arrange appropriate equipment, protection, inspection, maintenance and safe isolation. A damaged lead or enclosure needs action even if a previous inspection label remains current. Ordinary switching off is not proof that all relevant energy has been isolated. [HSE31] [HSE30]

For buried services, use planning, service plans, locating equipment and safe digging practices together. Plans can indicate likely locations but may be incomplete or inaccurate; a line on a drawing does not establish exact position or depth. Competent locating and the agreed safe system remain necessary. Identification must include services owned by others, not only the main utility. [HSE33]

Overhead electrical lines can cause danger without direct contact because electricity can arc across a gap. Assess the full movement envelope of cranes, excavators, tipper bodies, platforms and long materials. Liaise with the line owner and establish appropriate avoidance or protection arrangements. Never invent a universal clearance from memory or assume a line on wooden poles is a telephone line. [HSE32]

The manager should know what information is required, who is competent to resolve it and what prevents work starting on an unverified assumption. This is different from personally testing a circuit or choosing electrical protection without the necessary competence. Clear boundaries help the correct specialist input happen before the programme creates pressure to proceed.

Key points to remember

- Service plans are one part of a safe system, not exact-location proof.
- Overhead line danger can arise from close approach without contact.
- A current label does not override new damage.

Know these terms

Arcing: Electrical discharge across a gap, which can cause severe burns or other injury.

Safe isolation: A competent process controlling relevant energy and preventing unintended re-energisation for the work.

The plan and the detector disagree

A drawing places a cable outside the excavation, but locating results suggest a service within it.

Why it matters: The conflicting evidence must be resolved through the competent locating and safe-digging arrangements. The drawing is not a reason to disregard current indications. Clarify the service and working method before the affected excavation proceeds; do not guess the depth or identity.

Common misunderstanding: No contact with an overhead line means no electrical danger.

Remember: Close approach can be dangerous because arcing can occur.

Recall it without looking

What four elements does HSE identify for work near buried cables?

Planning, use of cable plans, cable locating devices and safe digging practices; they complement each other.

Primary references: HSE31, HSE30, HSE33, HSE32. See the source list at the end.

16. Excavation planning, support and inspections

Identify the information and changing conditions that determine excavation safety.

What you should understand

- Identify the information and changing conditions that determine excavation safety.
- Explain the worked example and check your understanding with the questions.

An excavation can harm people through collapse, falling material, people or plant falling in, water, services, hazardous atmospheres or effects on nearby structures. There is no depth below which every excavation is automatically safe. The ground, loading, water, work and surroundings determine the precautions. Never use a remembered depth as permission to enter unsupported ground. [HSE34]

Before work, obtain relevant information about ground conditions, existing structures, services and water. Plan suitable protection against collapse, safe access, edge protection, material and plant positions, and inspection. The support or battering solution needs appropriate competence and, where required, design. The manager coordinates the information and arrangements; a short revision note cannot select shoring or calculate a safe edge distance. [HSE34] [HSE35]

Support and battering arrangements must be inspected by a competent person at the start of the working shift and after events specified by the applicable requirements, including circumstances likely to affect stability and falls of material. Work must not proceed while conditions are unsafe. Reports and corrective actions need to be available through the site arrangements. A daily check does not give permission to ignore a relevant change later in the shift. [HSE34]

Rain, water ingress, new stockpiles, vehicle movements, vibration or changes to adjacent structures may alter design assumptions. Communicate the exact change and obtain the required inspection or design review. Removing one problem, such as a stockpile, does not prove that remaining water or ground conditions are acceptable. A usable plan explains who can decide on restart and how the decision reaches affected trades.

Use an inspection to make a decision, not just complete a record

A useful inspection record identifies the excavation and time, the condition found, action already taken and any further action needed, together with the required reporting particulars. The manager needs to know whether the affected work can proceed under the accepted arrangements and which issues remain open. An action such as “monitor trench” is unclear unless the relevant competent arrangements establish what is being monitored, by whom and what change requires action. [HSE34]

Worked reasoning: one defect is corrected, two questions remain

Consider a fictional excavation where an inspection records new water ingress, stored materials beyond the agreed loading assumptions and concerns about a nearby wall. The materials are moved. A supervisor then proposes restarting because the visible housekeeping issue has been corrected.

The conclusion is incomplete. Correcting the material storage addresses one observation; it does not establish the effect of water or the adjacent wall on stability. The manager should keep the affected exposure controlled, make the remaining questions explicit and obtain the relevant inspection and design input. Pumping water away is not automatically a complete answer either: the dewatering method and its

effect on stability require competent consideration. No safe support arrangement, pumping method or distance from an edge can be selected from this example. [HSE34] [HSE35]

For a model revision answer, separate three decisions: the immediate restriction that prevents exposure; the competent work needed to establish and restore suitable conditions; and the evidence and communication needed before affected work resumes. Record each unresolved item with an owner and status. Close an action because its intended result has been verified, not simply because a person has replied to an email. [HSE05]

Key points to remember

- Depth alone cannot establish that an excavation is safe.
- Plan ground support, services, access, water and neighbouring loads together.
- Inspect and review after relevant changes, not only at the routine time.

Know these terms

Battering: Sloping excavation sides to a suitable angle as part of an assessed method.

Surcharge: An additional load near an excavation, such as stored material or plant, that can affect stability.

Rain and a new stockpile

After overnight rain, a subcontractor proposes storing blocks beside an excavation outside the loading assumptions of its support design.

Why it matters: Both water and added loading need competent consideration. Prevent the proposed load and affected exposure, arrange inspection and any design review, resolve defects and communicate the accepted arrangements. Yesterday's signed inspection cannot answer today's changed assumptions.

Common misunderstanding: An excavation is safe if it is shallower than a fixed depth.

Remember: Collapse and other hazards depend on conditions; there is no universally safe unprotected depth.

Recall it without looking

Name three changes that may require an excavation review.

For example, heavy rain or water ingress, new loads near the edge, damage to supports, a fall of material or changed nearby work.

An excavation inspection records water ingress and unsuitable nearby storage. The storage is moved. What still needs resolving before restarting affected work?

The remaining water and stability concerns, and any other open findings, still need competent assessment and the required controls. Check the accepted conditions, relevant inspection or design decision and communication before restart. One completed action does not close a separate unresolved hazard.

A subcontractor proposes pumping out new water and then using the excavation immediately. Why is that decision incomplete?

Removing visible water does not by itself establish stable ground, adequate support or the effect of the pumping process. The relevant competent arrangements must assess the water, dewatering proposal and stability, then verify suitable conditions before affected work resumes.

Improve the inspection follow-up "excavation issue emailed" into a useful management record.

Identify the location and observed condition, immediate restrictions, the person responsible for the next decision, the information or competent assessment needed, and how completion and permission to resume will be communicated. Record unresolved matters separately so an acknowledgement is not mistaken for closure.

Primary references: HSE34, HSE35, HSE33. See the source list at the end.

17. Temporary works, demolition and structural stability

Manage temporary structures and demolition as planned sequences with controlled changes.

What you should understand

- Manage temporary structures and demolition as planned sequences with controlled changes.
- Explain the worked example and check your understanding with the questions.

Temporary works are engineered arrangements that support or protect structures, plant or excavations, or provide access during construction. Examples include formwork, falsework, propping, working platforms, hoardings and excavation support. Temporary does not mean low risk: failure can affect workers, the public and the permanent structure. The arrangement must withstand foreseeable loads and be used for its intended purpose. [HSE35]

Management needs a clear process for identifying the requirement, obtaining design where needed, checking the design appropriately, installing it correctly, inspecting, authorising use, controlling changes and removing it in a safe sequence. HSE describes a suitably authorised temporary works coordinator as an effective way to manage this. The job title alone is not proof of competence, and SMSTS does not qualify someone to design or approve every temporary structure. [HSE35]

Demolition and structural alteration need adequate information and competent planning before work begins. Understand the structure, stability, services, hazardous materials and effects on adjoining buildings. The sequence matters: removing an element can change how loads are carried even if the finished drawing appears straightforward. The principal designer coordinates pre-construction risk work, while the principal contractor manages the construction phase. [HSE36]

Changes must return to the appropriate competent process. A support that obstructs a delivery cannot simply be removed because it is inconvenient. Likewise, additional loading, a different sequence or changed site conditions can require design review. The manager's contribution is to make assumptions, responsibilities and authorisation clear, and ensure site practice matches the accepted arrangement.

Follow the evidence from the design brief to removal

A temporary-works process should connect the intended use and site conditions to the design, appropriate checking, correct installation and controlled use. The organisation chooses its management arrangements; particular form names or job titles are not universal legal requirements. Where a coordinator is appointed, they need authority as well as competence. [HSE35]

1. **Define:** identify the arrangement, its location, intended function, relevant loads and interfaces. Obtain missing information through the competent design process.
2. **Prepare:** establish the design information and checking appropriate to the work, then make the correct instructions available to those installing it.
3. **Verify:** confirm that the installed arrangement matches the accepted information before it is relied on.
4. **Control:** identify who authorises use and changes under the project procedure. Plan inspection and communicate the conditions of use.

5. **Remove:** use the agreed sequence and competent confirmation that the support is no longer needed; the desired final layout is not proof of stability at every intermediate stage.

Worked reasoning: the wrong revision reaches the workface

In a fictional structural alteration, the design office issues revision B of a support arrangement. The installer still has revision A, while a delivery coordinator assumes the area will be available that afternoon. The manager finds three connected uncertainties: which instruction is current, whether the installation matches it, and whether the delivery can proceed without affecting the support.

A useful register entry identifies the location, relevant design revision, unresolved query, responsible decision-maker and status under the project's procedure. It does not mark the arrangement ready merely because a drawing exists. Resolve the discrepancy through the competent process, verify the accepted arrangement and communicate the resulting restrictions to the affected teams. This exercise is about tracking and authorising a decision; it does not supply a support design or a removal method. [HSE35] [HSE36]

Key points to remember

- Temporary structures must suit foreseeable loads and their intended use.
- Installation, use, modification and removal all need control.
- A planned final structure does not prove every intermediate demolition stage is stable.

Know these terms

Falsework: Temporary support used while a permanent structure is being formed or constructed.

Temporary works coordinator: A person given suitable authority to coordinate the temporary-works management process within the project’s arrangements.

A prop blocks the delivery route

A prop installed for an alteration obstructs a planned material movement. A contractor suggests removing it for ten minutes.

Why it matters: The prop’s temporary removal is a change to the structural arrangement. The relevant competent design and management process must assess it and authorise a suitable alternative if one exists. The short duration and delivery pressure do not prove stability during the gap.

Common misunderstanding: Temporary support may be altered by any experienced trade.

Remember: Changes can affect load paths and stability; use the competent design and authorisation arrangements.

Recall it without looking

Why must demolition planning consider the sequence, not just the finished condition?

Intermediate stages can remove supports or change load paths before the final stable condition is reached.

The installed support matches drawing revision A, but the designer has issued revision B. What evidence is missing before the manager can rely on it?

The competent process must establish which revision applies, what changed and whether the installed arrangement is acceptable or needs alteration. Record the decision and any required verification, then communicate the conditions of use. Matching an obsolete drawing does not answer whether the current requirements are met.

A temporary-works register contains a drawing number and an installer's name. What further management information would help control the arrangement?

Its location and intended use, the applicable revision, responsible design and coordination roles, relevant checking and installation verification, status and conditions of use, outstanding actions and how changes or removal are authorised. These are useful management prompts, not a universal statutory form.

A permanent structure will be stable when an alteration is finished. Why does that not justify removing temporary support early?

Loads and stability can differ at intermediate stages. The competent sequence must establish when support can change or be removed and what conditions must first be met. The final drawing does not prove the partly completed structure can carry the same loads.

Primary references: HSE35, HSE36. See the source list at the end.

18. Confined-space recognition, entry and rescue

Recognise a confined-space risk and explain why entry and rescue require planned specialist arrangements.

What you should understand

- Recognise a confined-space risk and explain why entry and rescue require planned specialist arrangements.
- Explain the worked example and check your understanding with the questions.

A confined space is enclosed or largely enclosed and has a reasonably foreseeable specified risk, such as fire, explosion, loss of consciousness, asphyxiation or drowning. Size alone does not decide it: a large chamber can qualify, while a cramped place without the relevant risk may not. The assessment must consider the space, its contents, connected systems and the work that could introduce hazards. [HSE37]

The first question is whether the work can be done without entering. If entry cannot be avoided, competent assessment and a suitable safe system must address the actual risks. Possible considerations include isolation of incoming substances or energy, atmospheric conditions, ventilation, access, equipment, communications and the people needed. A permit can be part of the control system but cannot make an unsuitable atmosphere safe on its own. [HSE37] [HSE31]

Conditions can change while work is underway. Work processes may consume oxygen or introduce fumes, and connected systems can create unexpected inflow. An earlier observation, open hatch or lack of smell cannot prove continued safety. The monitoring and control arrangements need to match the assessed risk, implemented by people competent for the work. [HSE37]

Emergency arrangements must be in place before entry and suited to the space and task. A rescue plan needs the appropriate trained people, equipment, communications and method; merely having a phone or relying on an unplanned response from emergency services is insufficient. Unplanned rescue entry can expose a second person to the same atmosphere or other hazard. Raise the alarm and use the established response.

Key points to remember

- Enclosure plus a foreseeable specified risk defines the issue, not small size alone.
- Avoid entry where practicable.
- Entry planning and rescue planning must be ready before the task starts.

Know these terms

Asphyxiation: A life-threatening lack of sufficient oxygen reaching the body.

Permit to work: A controlled authorisation process for specified work and conditions; it does not replace the underlying safe system.

The open hatch

A chamber's hatch is open and the air appears clear. A worker proposes a quick entry to retrieve equipment without using the planned entry arrangements.

Why it matters: An open hatch and clear appearance do not establish the atmosphere or other risks. Reconsider whether retrieval can avoid entry; if entry is needed, use the competent assessed system and rescue arrangements. “Only a minute” does not remove the possibility of rapid incapacitation.

Common misunderstanding: A confined space must be too small to stand upright.

Remember: A large enclosed space can present the specified risks.

Common misunderstanding: No smell means the atmosphere is safe.

Remember: Dangerous atmospheres may not be detected by smell or sight.

Recall it without looking

Why is a phone number alone not a confined-space rescue plan?

It does not provide the suitable people, equipment, access and method needed to rescue without creating additional casualties.

Primary references: HSE37, HSE31, HSE39. See the source list at the end.

19. Fire prevention and emergency planning

Connect ignition and fuel control with escape, warnings and a workable emergency response.

What you should understand

- Connect ignition and fuel control with escape, warnings and a workable emergency response.
- Explain the worked example and check your understanding with the questions.

Fire requires fuel, an ignition source and oxygen. Site prevention starts with identifying where combustible materials or dangerous substances could meet ignition, including hot work, electrical faults and smoking. Reduce unnecessary combustible storage, keep waste controlled and arrange suitable handling and storage of flammable substances. DSEAR addresses risks from dangerous substances that can cause fire, explosion or similar energetic events. [HSE44]

A fire-risk assessment also informs warning, escape and response. Routes and exits must remain usable as the building and site change; work in an occupied building must not compromise the existing occupants' fire protection. The manager should coordinate temporary openings, altered routes, fire separation, alarms and access for emergency services. The general fire-safety law differs between UK jurisdictions; the Fire Safety Order applies in England and Wales. [HSE38]

Hot-work control can include considering a suitable cold method, managing nearby combustible material, protecting adjacent or hidden areas and arranging appropriate fire checks. A permit records the agreed authorisation and conditions; it does not remove the ignition source or perform the checks. Follow the assessed permit and monitoring arrangements rather than inventing one universal fire-watch duration. [HSE38] [HSE44]

Emergency planning covers more than fire: serious injury, collapse, flood, electrical events or chemical release may need different actions. Establish alarms, roles, communication, access, first-aid arrangements and support for everyone present. Practise relevant responses and review them when the layout, workforce or shift changes. An emergency contact list is useful but does not prove that people can hear an alarm, escape or obtain help. [HSE39]

First-aid provision follows a needs assessment covering the work hazards, workforce, location, work patterns and access to help. Arrange appropriate equipment, facilities and personnel for all working periods, including shift changes and absences. An appointed person can take charge of the arrangements and call for help; the title does not make that person a trained first aider. Where the assessment requires trained first aiders, provide sufficient suitably trained cover. Inform workers how to obtain assistance and check the arrangements still work when activities, staffing or hours change. [HSE54]

Key points to remember

- Prevent ignition and control fuel as well as planning evacuation.
- A changed layout can invalidate escape and response arrangements.
- A permit supports a controlled task; the actual controls must be in place.

Know these terms

DSEAR: Dangerous Substances and Explosive Atmospheres Regulations 2002 in Great Britain.

Hot work: Work involving a source of heat, flame or sparks that may ignite materials in the surroundings.

The new partition blocks escape

A temporary partition improves work separation but closes the escape route used by another contractor.

Why it matters: Coordinate the proposed partition with the fire and emergency arrangements before relying on it. A control for one activity must not create an unplanned barrier to escape for another group. Establish an appropriate alternative arrangement, communicate it and check it in the actual layout.

Common misunderstanding: Signing a hot-work permit makes the area safe.

Remember: The permit must reflect implemented controls and the required checks; the signature cannot prevent ignition.

Recall it without looking

Name three things to check after a site-layout change.

For example, escape routes, alarm coverage and emergency-service access. Assembly, headcount and first-aid arrangements may also be affected.

Primary references: HSE38, HSE39, HSE44, HSE54. See the source list at the end.

20. Environmental controls, waste and pollution

Plan materials and drainage to prevent pollution and manage waste responsibly.

What you should understand

- Plan materials and drainage to prevent pollution and manage waste responsibly.
- Explain the worked example and check your understanding with the questions.

Environmental management starts before waste or pollution occurs. Order and store materials to reduce damage and surplus; consider suitable reuse before recycling, recovery and disposal. A labelled skip is only one part of the process. People need to know what can enter it, how incompatible or hazardous material is kept separate and who checks collection arrangements. [EA02]

In England, business waste responsibilities include safe storage, appropriate transfer documentation and checks that those taking the waste are authorised. Hazardous waste has additional requirements. Do not assume that a cheap collection or a verbal assurance completes the producer's responsibilities. Requirements and regulators differ across the UK nations; use the guidance for the location rather than applying one nation's paperwork rules everywhere. [EA02]

Pollution prevention includes identifying drainage routes, storage locations and potential pathways into water or ground. Surface-water drains may lead directly to the environment. Concrete wash-water, fuels, oils and other liquids must not be treated as harmless because they can be diluted or are not visibly oily. Plan suitable containment, transfer and authorised disposal arrangements before the task. [EA01]

A spill response needs known responsibilities, appropriate resources and competent action. Protect people first, raise the alarm through the site procedure and prevent further spread where it is safe and within competence to do so. Do not improvise chemical treatment or wash contamination into a drain. Record the event and review the source of the failure, such as unsuitable storage or an uncontrolled transfer point.

Key points to remember

- Prevent waste before relying on collection and disposal.
- Know where drains lead before planning liquid-handling work.
- Waste and pollution rules depend on the UK nation and type of material.

Know these terms

Waste hierarchy: The priority order of prevention, preparation for reuse, recycling, other recovery and disposal.

Pollution pathway: A route by which a substance can reach people or the environment, such as a drain or unprotected ground.

The convenient drain

A subcontractor proposes washing concrete residue into the nearest drain because the water will dilute it.

Why it matters: Establish what the drain connects to and use the agreed washout and disposal arrangements. Dilution does not authorise discharge or remove the potential for harm. The manager

should arrange a suitable location and containment before washing begins, then check that the crew can use it.

Common misunderstanding: A registered collector removes every waste responsibility from the producer.

Remember: The producer must still meet relevant duty-of-care requirements and use suitable documentation and checks.

Common misunderstanding: Diluting a pollutant makes drain disposal acceptable.

Remember: Dilution is not permission to discharge; the pathway and applicable controls matter.

Recall it without looking

Give an example of preventing waste rather than recycling it.

Ordering suitable quantities or dimensions so fewer materials are damaged or cut off before use.

Primary references: EA01, EA02. See the source list at the end.

21. Lone work, out-of-hours tasks and driving

Assess what changes when a worker is separated from help or travelling for work.

What you should understand

- Assess what changes when a worker is separated from help or travelling for work.
- Explain the worked example and check your understanding with the questions.

A lone worker works without close or direct supervision. Someone can be effectively alone on a large site even when other people are elsewhere. The important question is how the person can work safely and obtain help, taking account of the task, location, individual needs and foreseeable emergencies. Some work cannot be safely done alone. [HSE40]

Plan suitable training, supervision and monitoring, with agreed contact intervals and a response when contact is missed. The arrangement must be tested against real conditions: a mobile phone with no signal is not a reliable communication method. Check access, violence or security concerns, first aid, welfare and the ability of others to reach the worker. Avoid assuming that a general daytime procedure covers isolated evening work. [HSE40] [HSE39]

Driving for work is a work activity. Manage the journey, driver or rider and vehicle together, including route, weather, time pressure, fatigue, vehicle condition and suitability. Travel between workplaces or to a work activity can create risks that the site programme must account for. A deadline that encourages speeding or a long drive after an exhausting shift is a management issue, not only a driver choice. [HSE41]

A useful plan names who checks the worker's return or contact, what triggers an alert and what help is available. For a journey, it should allow realistic time and suitable breaks and avoid unnecessary travel where feasible. Reassess when work overruns or conditions change, rather than treating the original itinerary as a guarantee of safe completion.

Key points to remember

- Being on a busy project does not guarantee nearby help.
- A missed-contact procedure needs a real response owner.
- Driving risk includes the journey, person and vehicle.

Know these terms

Lone working: Working without close or direct supervision, including isolation within a larger workplace.

Monitoring arrangement: A planned method of checking a worker's status and responding when expected contact is missed.

An isolated evening visit

A technician is asked to inspect a remote area after the main crew leaves. The area has poor phone reception and the usual first aider has finished.

Why it matters: Assess whether the work is suitable for lone working and establish reliable communication, supervision and emergency support. Change the timing or staffing if necessary. A mobile

phone listed in the method does not solve the known reception problem, and the daytime arrangements no longer match the task.

Common misunderstanding: A mobile phone is a complete lone-working system.

Remember: It needs reliable operation, agreed contact and an effective response; the task may require additional measures or another person.

Recall it without looking

What three elements should be considered for driving-for-work risk?

The journey, the driver or rider, and the vehicle, including how programme pressure and fatigue affect them.

Primary references: HSE40, HSE41, HSE39. See the source list at the end.

Course and assessment arrangements

For the full SMSTS course, the current CITB Appendix G requires completion of four core exercises, a passed trainer review and a passed examination. The exam has 25 questions worth 32 marks: 18 single-answer multiple-choice items and seven multi-response or short written-answer items worth two marks each. The pass mark is 26/32 and the time allowed is 35 minutes. GE700 and the XA6 delegate workbook may be used in the final 15 minutes. [CITBG]

SMSTS-R has its own rules in Appendix H. Its examination also has 25 questions, 32 available marks, a 26-mark pass and 35 minutes, with GE700 permitted in the final 15 minutes. Do not import the full course's four-exercise and trainer-review route into refresher preparation. Confirm current joining, publication and assessment arrangements with your provider. [CITBH]

The questions here are original, independent learning activities. Topic practice is untimed and does not reproduce official papers, official mark weighting or protected course exercises. Use the explanations to identify what you understand and what needs more work, alongside your supplied course materials. A practice score is not a certificate or a prediction of passing.

Primary sources

Sources reviewed on 12 November 2026. The notes and questions are independently written; the links let you read the underlying guidance.

[CITBG] CITB SMSTS scheme rules: Appendix G, version 03.04, February 2026

https://www.citb.co.uk/media/lezm1ptr/appendix-g_site-management-safety-training-scheme-smsts-_v0304-1.pdf

[CITBH] CITB SMSTS refresher scheme rules: Appendix H, version 02.05, February 2026

https://www.citb.co.uk/media/ggobkfsu/appendix-h_site-management-safety-training-scheme-refresher-smsts-r-_v0205-1.pdf

[HSE01] Health and Safety at Work etc Act 1974

https://www.hse.gov.uk/legislation/hswa.htm

[HSE02] Differences between prohibition and improvement notices

https://www.hse.gov.uk/foi/internalops/og/ogprocedures/notices/noticetype.htm

[HSE03] Summary of duties under CDM 2015

https://www.hse.gov.uk/construction/cdm/2015/summary.htm

[HSE04] Construction phase plan under CDM 2015

https://www.hse.gov.uk/pubns/cis80.pdf

[HSE05] How to manage health and safety

https://www.hse.gov.uk/managing/introduction/how-to-manage.htm

[HSE06] Steps needed to manage risk

https://www.hse.gov.uk/simple-health-safety/risk/steps-needed-to-manage-risk.htm

[HSE07] Construction administration, assessments and method statements

https://www.hse.gov.uk/construction/safetytopics/admin.htm

[HSE08] Site rules and induction

https://www.hse.gov.uk/construction/safetytopics/site-rules-induction.htm

[HSE09] Training and competence for work equipment

https://www.hse.gov.uk/work-equipment-machinery/training-competence.htm

[HSE10] Principal contractors under CDM 2015

https://www.hse.gov.uk/construction/cdm/2015/principal-contractors.htm

[HSE11] Investigating accidents and incidents: HSG245

https://www.hse.gov.uk/pubns/hsg245.pdf

[HSE12] When to report an incident under RIDDOR

https://www.hse.gov.uk/riddor/when-do-i-report.htm

[HSE13] Types of reportable incidents

https://www.hse.gov.uk/riddor/types-of-reportable-incidents.htm

[HSE14] How to carry out a COSHH risk assessment

https://www.hse.gov.uk/coshh/basics/assessment.htm

[HSE15] Construction dust: CIS36

https://www.hse.gov.uk/pubns/cis36.pdf

[HSE16] Lead: when are you most at risk?

https://www.hse.gov.uk/lead/mostatrisk.htm

[HSE17] Arrange an asbestos survey

https://www.hse.gov.uk/asbestos/duty/arrange-asbestos-survey.htm

[HSE18] Asbestos information, instruction and training

https://www.hse.gov.uk/asbestos/training.htm

[HSE19] Control of Noise at Work Regulations

https://www.hse.gov.uk/noise/regulations.htm

[HSE20] Control of Vibration at Work Regulations

https://www.hse.gov.uk/vibration/hav/regulations.htm

[HSE21] Assess manual handling you cannot avoid

https://www.hse.gov.uk/msd/manual-handling/assess-manual-handling.htm

[HSE22] Construction welfare overview

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[HSE23] What are the stress Management Standards?

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[HSE24] Managing drug and alcohol misuse at work

https://www.hse.gov.uk/alcoholdrugs/index.htm

[HSE25] Introduction to work at height

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[HSE26] Scaffolds: design, competence and inspection

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[HSE27] Traffic management on site

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[HSE28] Planning and organising lifting operations

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[HSE29] Thorough examination of lifting equipment

https://www.hse.gov.uk/work-equipment-machinery/thorough-examinations-lifting-equipment.htm

[HSE30] PUWER overview

https://www.hse.gov.uk/work-equipment-machinery/puwer-overview.htm

[HSE31] Maintenance of work equipment

https://www.hse.gov.uk/work-equipment-machinery/maintenance.htm

[HSE32] Electricity: overhead power lines

https://www.hse.gov.uk/construction/safetytopics/overhead.htm

[HSE33] Electricity: underground cables

https://www.hse.gov.uk/construction/safetytopics/underground.htm

[HSE34] Excavations

https://www.hse.gov.uk/construction/safetytopics/excavations.htm

[HSE35] Temporary works

https://www.hse.gov.uk/construction/safetytopics/temporary-works.htm

[HSE36] Demolition

https://www.hse.gov.uk/construction/safetytopics/demolition.htm

[HSE37] Introduction to confined spaces

https://www.hse.gov.uk/confinedspace/introduction.htm

[HSE38] Construction general fire safety

https://www.hse.gov.uk/construction/safetytopics/generalfire.htm

[HSE39] Emergency procedures

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[HSE40] Protecting lone workers: INDG73

https://www.hse.gov.uk/pubns/indg73.pdf

[HSE41] Driving and riding safely for work

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https://www.gov.uk/guidance/pollution-prevention-for-businesses

[EA02] Business and commercial waste responsibilities

https://www.gov.uk/dispose-business-commercial-waste

[HSE42] Health surveillance overview

https://www.hse.gov.uk/health-surveillance/overview.htm

[HSE43] Safe use of ladders and stepladders

https://www.hse.gov.uk/work-at-height/ladders/index.htm

[HSE44] Dangerous Substances and Explosive Atmospheres Regulations

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[NI01] CDM Regulations (Northern Ireland) 2016

https://www.hseni.gov.uk/articles/construction-design-and-management-regulations-northern-ireland-2016

[LAW01] Noise Regulations 2005: action and limit values

https://www.legislation.gov.uk/uksi/2005/1643/regulation/4

[LAW02] HSWA 1974: employee duties, section 7

https://www.legislation.gov.uk/ukpga/1974/37/section/7

[HSE45] Choosing quieter equipment and machinery

https://www.hse.gov.uk/noise/choosequieter.htm

[HSE46] Vibration risk assessment

https://www.hse.gov.uk/vibration/hav/assessrisks.htm

[HSE47] Hand-arm vibration: symptoms and prevention

https://www.hse.gov.uk/vibration/hav/yourhands.htm

[HSE48] How and when to use a ladder at work

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[HSE49] Health and safety: criminal and civil law

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[HSE51] Construction work at height: rescue and access questions

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[HSE52] Assessing work at height: restraint and arrest

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[HSE53] Respiratory protective equipment: fit testing basics

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[LAW03] RIDDOR 2013: non-fatal worker injuries, regulation 4

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