



CONSTRUCTION
SAFETY

Basics of Supervising

Workbook and Answer Book



Home Study

Basics of Supervising Home-Study Training Program

Workbook

Answer Book

Developed by the

Construction Safety Association of Ontario

in conjunction with the

**Provincial Labour-Management
Health and Safety Committee**

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Basics of Supervising Home-Study Training Program

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Workbook

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Case Study 1

Charlie, Construction Supervisor

For the past two years Charlie has worked as a carpenter lead hand for General Contractors Limited. He has 10 years of construction experience but is just starting his fourth month as a supervisor. He plans to take some supervisory training next fall.

His crew is currently doing inside finishing on a one-storey shopping mall. It's Monday morning and they are four days behind schedule. Except for two carpenters and one labourer, his crew of eight is new to him. Charlie is expecting two additional carpenters to start this morning, even though his shop has cautioned him that his labour person-hours will run over the limit with the extra two carpenters.

Charlie reports to George Thompson, the superintendent on the project. George has been pushing Charlie hard to keep to the schedule, telling him, "This job has got to finish no later than two weeks from now! If we hold up the opening, we get hit with big penalties. I won't take responsibility if your crew isn't finished. It's your head on the block, so get things moving!"

The message is clear, but Charlie can't see how he can meet the deadline, even with two extra crew members expected this morning. The electricians and plumbers are both behind schedule, delaying his work. He's also still waiting to receive a large quantity of special wood paneling substituted at the last minute by the owner's architect.

As Charlie begins his day, he is confronted by the following problems.

- (1) An early phone call informs him that one of his labourers won't be in today. The labourer told the office that he had strained his back just before quitting time on Friday and that "It's really sore and has been bothering me all weekend, so I can't work today." The labourer may see his doctor later in the day. Charlie knows this man has been laying out doors so the carpenters could set them. Charlie wants one worker to lay out doors and

four carpenters to set them, so now he'll have to make other arrangements. He also anticipates the paperwork related to the injured labourer's visit to the doctor.

- (2) Two of his carpenters report they can't work in a specific area because the plumbers haven't finished there yet. These two carpenters have returned to the job box, where they are now standing around chatting, waiting for direction.
- (3) Only one of his two new carpenters has shown up.
- (4) The health and safety representative is complaining that the newly arrived carpenter doesn't have any WHMIS training. "You better not put him on any of that glue work," says the rep. "Those glue fumes would knock out an elephant. They are really hazardous. You'll have a work refusal on your hands if you aren't careful."
- (5) As his finish trim carpenter wanders down the mall he casually mentions to Charlie that he is almost out of 2" finishing nails. He only has enough for another hour. If Charlie wants him to keep setting trim, he'd better get more nails fast.
- (6) Finally, just to make his morning complete, George the superintendent calls Charlie on the radio and says he wants to see him at 9:30. George wants to talk about the job schedule again.

These kinds of problems have been the routine for some time now and Charlie's stomach is starting to knot up. It all seems like it's just too much to straighten out. He is already knocking himself out trying to keep things running smoothly and to give everybody a hand. There's hardly time to think. Unless this stops, management can forget about keeping him as a supervisor. Who needs the aggravation? And why can't George, with his precious schedule, see what the real problems are?

Charlie really has a plateful of problems, and good reason to be discouraged. But he needs to realize that overcoming problems is just part of his supervisory job.

Do some personal brainstorming and prepare answers for the following questions.

1. *What are Charlie's problems?*

2. *What would you do if you were in Charlie's situation?*

3. *What are the reasons why Charlie is in this situation?*

[illegible]

4. *What should Charlie do to make sure he doesn't get into a situation like this again?*

[illegible]

Worksheet 1

Options Supervisors Can Use to Deal with Problems

In each of the following scenarios apply one of the four “T”s (treat, tolerate, transfer, terminate) to deal with the problem.

Scenario 1

Bill is an excellent tradesperson and an old friend of yours. He works well with the crew and seldom complains. However, he has a habit of quitting just before the cleanup time you’ve established.

Whenever this has occurred with others in the crew, your reaction has always been predictable. You immediately told them, in front of everyone, that if they liked working in this crew they had better shape up and follow the rules. “Cleanup is 15 minutes before quitting time and no sooner.”

Up to now you’ve overlooked his little habit for two reasons: first, Bill is a good worker and a highly skilled tradesperson whom you don’t want to lose; and second, you know he doesn’t accept criticism well. You’ve seen him quit two other sites when he took offence to something that was said. With work so busy and tradespeople in short supply, you don’t want him to walk out.

But now it’s gotten worse. What was two or three minutes twice a week has become five minutes every day. The others in the crew are joking about Bill’s watch being on “fast time” or that his work area always sparkles at least five minutes before cleanup time. Similar infractions are happening more and more with the rest of the crew, who repeatedly make the excuse that “I saw Bill cleaning up and thought it was time.”

You realize it's been a mistake putting up with this for so long. Something has to be done before you lose all authority with the crew.

Describe how you would treat, tolerate, transfer, or terminate the problem.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins or other markings visible.

Scenario 2

During his daily meeting Jim, the general foreperson, assigned some work and discussed progress on the job. Everything seemed great until he brought up the subject of health and safety. Suddenly he was ranting and raving about too many petty complaints and said he was laying down his version of the law. “The next worker who starts crying about health and safety,” he warned, “is going down the road.”

After the meeting you talked briefly with the other supervisors. Everyone knew that Jim’s ultimatum was wrong. But when Jim was in this kind of mood, it was a mistake to try to talk reason to him. If they could just let things cool down, maybe everything would be okay.

But Murphy’s Law is making sure that won’t happen. You have scarcely returned to work when one of the labourers calls you over and says he won’t work with the acid wash he’s been given. “I haven’t had any WHMIS training on this product and just reading the label tells me this chemical is bad news. The gloves and mask you gave me just aren’t going to cut it.”

The superintendent and Jim have been pressing to have this work finished and now you’re faced with a work refusal. Jim’s “down the road” threat is still ringing in your ears. You sense more people than the labourer might be going down the road if this isn’t handled properly.

Describe how you would treat, tolerate, transfer, or terminate the problem.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Scenario 3

Monday was the start of a big construction job to expand an automotive plant. Everybody had to attend a safety presentation by the in-plant safety director. It was a smooth presentation with a clear message: “Accidents don’t happen, they’re caused. In this plant our workers are one of our most important assets and we intend to do everything possible to protect them. That includes construction workers who come to build new plant facilities for us.”

Now it’s Tuesday morning and the super has just dropped the other shoe. All supervisors will be expected to deliver a 15-minute safety talk every Thursday immediately following the lunch break. The in-plant safety coordinator will be on hand for these talks to ensure that they are in fact delivered and are meaningful in content. Then, as if he were making a major concession, the super says he is going to make it easy for us by letting us select our own health and safety topics.

The super is a nice guy and a fair boss, but to us this looks like classic buck passing. How is a supervisor supposed to know what to talk about? Where is he to get the time and information to prepare these presentations? None of us has any experience in this sort of thing—public speaking was not part of our apprenticeship learning.

Describe how you would treat, tolerate, transfer, or terminate the problem.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Scenario 4

This was the fourth time you'd wanted to switch the crew onto another floor, but found that either the area wasn't clear of stored materials, or that the fitters hadn't finished the piping. It wasn't fair that others could mess up your schedule and just shrug their shoulders, but that when *you* didn't finish the insulation so others could get started, they complained loud and long.

After all, the schedule had been thoroughly discussed at the site meetings. The super had promised to have the floors cleared, and the fitter had assured everyone he'd gotten more workers in order to have the areas ready for you.

Both your employer and the super are on your case. "What's the hold-up?" they want to know. Well, the site meeting is coming up tomorrow, and it is time to resolve this. Besides, you haven't seen any extra fitters and the super had plenty of excuses. It isn't fair to expect you to finish these floors on time if you can't get access to them until half your time is gone.

As you look through past entries in your site diary, you see it there in black and white: three previous occasions where you had been committed to start a floor but hadn't been able to because of others.

Describe how you would treat, tolerate, transfer, or terminate the problem.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Scenario 5

It wasn't a big deal but it was starting to rub you the wrong way. Twice now, you had booked the elevator at a specific time and, on both occasions, the crew using it before you hadn't been finished.

Both times, the super had asked if you could wait. When one load of material couldn't go up until the next day, he had even tarped it for you. Nevertheless, it still meant juggling workers around and changing the plan. It was an inconvenience you just didn't need.

This third incident had a little twist that called for a tough decision. This time it was the electricians who were going to be another half-hour with the elevator. The super said he realized you had been held up by them twice before. He was prepared to tell the electricians to step aside and let you load, since the time slot was yours.

But you also knew that the electricians had just done you a big favour. For a second time they had wired up a 220-volt service for you without back-charging the company. Your friendship with the electrical foreperson had paid off, but now you were on the verge of pulling the rug out from under him. It wasn't clear whether the elevator delay would hold up any of your crew for want of materials. But three times was a bit much. Did any of the other crews ever finish on time?

"Well," asked the super, "What's your pleasure? I'll stop them from using the elevator if you want."

Describe how you would treat, tolerate, transfer, or terminate the problem.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Scenario 6

It really is true: residential construction is crazy—a tough place for any company to make a buck and a tough place for a supervisor to stay on top of things. The crew is always turning over. And either you have more work than you can handle, or everyone is piled into one or two houses trying to find something to keep busy.

To make matter worse, they all think it's the Old West, where the rules are always for somebody else.

You were down to just three of your regular crew members and four others you hardly knew when this new episode blew up. For several days you'd been finding empty beer bottles stashed in houses your gang had just left.

At about three o'clock on Wednesday you walked in on one of your old hands and a new man knocking back beers. Your appearance was so sudden that they didn't have time to get rid of the bottles. When you recovered from the initial surprise, you asked some pointed questions: Didn't they know the rules? What was the matter with them? It was policy on this site that alcohol or drug use was cause for dismissal. And why would they pull a stunt like this when the job was almost done?

You listened to their stories, which certainly didn't justify their actions. They claimed it was hot and the water cooler was at the end of the block, five doors down. Besides, they only had one beer each.

So, what's your next step?

Describe how you would treat, tolerate, transfer, or terminate the problem.

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Case Study 2

Leadership Styles:

Jack Robinson, Superintendent

Jack Robinson is the superintendent of a large building project. He has just gathered five of his forepersons together for a brief jobsite meeting.

He tells the supervisors that the project is three weeks behind schedule and everyone on-site is going to have to work harder. He also says that he hasn't planned on hiring any new workers to help. It's up to each foreperson to push the crew harder and make up the time. After these announcements he walks away.

The five forepersons—Al, Bob, Fred, George, and Charlie—discuss among themselves how they intend to approach their crews about the job speed-up.

AL — “I’m just going to tell my gang what Jack said and leave it up to them to carry the ball. I’m like Bell Telephone. I just carry management’s messages. My job is really just to make sure the crew understands what’s got to be done. The rest is their problem.”

BOB — “Well, my gang has already been going at it steadily. I plan on first letting them know what Jack’s asking for. After that, I’ll just lay it on the line: I need their help on this one and I won’t forget it if they come through for me. I think I know them well enough that they will make it work once they see the spot it will put me in if they don’t pick up the pace.”

FRED — “I’m being paid to lead, and my crew performs because we look out for each other. I’ll figure out some options and talk it over with them. We’ve got to get back on track. Jack is okay and the company has

always treated me fairly. But I still want to see if I can't make it happen without putting everything on my crew's back. I have some ideas and just maybe I'll be able to pull this off so nobody gets the dirty end of the stick."

GEORGE— "Jack is not being fair about this. Sure, if the job is behind I know it's his job to push. But let's face it: my gang isn't three weeks behind. If we are behind, it isn't by more than one or two days. Why dump the whole three weeks on my guys? Why can't he sort out who's causing the big delay and put more pressure on them?"

CHARLIE— "What a crock! You guys must think you're still in kindergarten. This is construction! If my crew wants to keep their jobs, they'll do exactly what they're told. I have no intention of holding anybody's hand. I plan on making it 100% clear: they can get it in gear or pack it up. And believe me, they know I'll chop anybody who doesn't pick up the pace."

Identify by a word or a short phrase the leadership style being illustrated by each of the supervisors quoted above.

Al _____

Bob _____

Fred _____

George _____

Charlie _____

Module 2

Motivation and Communication

Worksheet 1

Workplace Motivators

*In the list below please indicate the 10 things you believe would be most likely to motivate **you** to do your best work.*

1. _____ Steady employment
2. _____ Respect as a person
3. _____ Adequate rest periods or coffee breaks
4. _____ Good pay
5. _____ Good physical working conditions
6. _____ A chance to turn out quality work
7. _____ Getting along well with others on the job
8. _____ A chance for promotion
9. _____ An opportunity to do interesting work
10. _____ Pensions and other security benefits
11. _____ Having employee services, such as recreational and social activities
12. _____ Not having to work too hard
13. _____ A feeling your job is important
14. _____ A written description of the duties of your job
15. _____ Being told by the boss when you do a good job
16. _____ Receiving a performance rating so you know how you stand
17. _____ A large amount of freedom on the job
18. _____ An opportunity for self-development and improvement
19. _____ A chance to work without being under direction or close supervision
20. _____ An efficient supervisor

Worksheet 2

Workplace Demotivators

In the list below indicate the 10 things you believe would be most likely to demotivate you at work.

1. _____ Disrespectful treatment
2. _____ Accomplishing little
3. _____ Material shortages
4. _____ Poor tools or equipment
5. _____ Redoing work
6. _____ Poor management attitude
7. _____ Confusion or poor planning
8. _____ Lack of recognition
9. _____ Incompetent personnel
10. _____ Poor pay
11. _____ Reliability on others
12. _____ Poor communications
13. _____ Unsafe conditions
14. _____ Lack of participation in decision making
15. _____ Incompetent supervision
16. _____ Paperwork
17. _____ Bad weather
18. _____ Working out of town
19. _____ Not having clean washroom facilities

Worksheet 3

Your Application of Workplace Motivators

In spite of how you feel about what motivates you personally, list, in decreasing order of importance, 10 motivators you believe are generally most important in the workplace.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Worksheet 4

Your Application of Workplace Demotivators

In spite of how you feel about what demotivates you personally, list, in decreasing order of importance, 10 demotivators you believe are generally most important to remove from the workplace.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Worksheet 5

Your Communications Strengths

In Module 2 you read that the communications activities listed below were ranked and listed in **descending** order of importance as judged by supervisors. Please disregard that ranking for the moment.

1. *On the following page, under the heading Your Rank, list, in **descending** order of importance, each of the communications activities listed below in terms of how good you believe you are, or would be, at doing them as a supervisor. List the activity only and not the corresponding number.*

1. Listening actively
2. Giving clear and complete instructions
3. Giving recognition for excellent performance
4. Communicating decisions to employees
5. Communicating effectively (verbally)
6. Explaining work
7. Obtaining and providing feedback in two-way communication sessions
8. Writing effectively
9. Explaining the need for cost reduction methods
10. Developing written goals
11. Justifying the need for new personnel and capital equipment
12. Participating in seminars and reading related materials.

Your rank	Survey Rank
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
5. _____	5. _____
6. _____	6. _____
7. _____	7. _____
8. _____	8. _____
9. _____	9. _____
10. _____	10. _____
11. _____	11. _____
12. _____	12. _____

2. Now that you've completed your ranking, enter, in the column indicated, the survey rank number from page 1 of this worksheet for each communication activity on your list. Compare your ranking with the survey ranking. How are you at doing those things supervisors believe are **most** important to the job of supervision? And, look closely at items 7 to 12 on **your** list. Here you have a custom-made list of communication activities you can concentrate on as you begin to develop improved supervisory skills.

Worksheet 6

Communication Barriers

Scenario 1

A worker yells a question to the foreperson but doesn't take into consideration the strong wind blowing at the time. The foreperson just walks away, never answering because he hasn't heard the message.

Identify the step in the communication cycle where the barrier has occurred, describe the problem (e.g., message not properly transmitted), and suggest a solution.

Step where barrier is occurring:

Brief description of problem:

Possible solution:

Scenario 2

A worker concerned about a family problem is worrying and thinking about it so much that he doesn't hear some specific instructions presented at a tool box talk.

Identify the step in the communication cycle where the barrier has occurred, describe the problem (e.g., message not properly transmitted), and suggest a solution.

Step where barrier is occurring:

Brief description of problem:

Solution:

Scenario 3

A veteran bricklayer is good at his job. But one day the supervisor comes along and wants him to change what he's doing to get a special result for the buyer. Unfortunately, the supervisor describes what he wants rapidly and in a language the bricklayer is not very familiar with. The bricklayer doesn't understand and the work doesn't get done properly.

Identify the step in the communication cycle where the barrier has occurred, describe the problem (e.g., message not properly transmitted), and suggest a solution.

Step where barrier is occurring:

Brief description of problem:

Solution:

Scenario 4

A worker is new to the job and has no real familiarity with the task he has been asked to do. He *knows* he doesn't know how to do it but he is too embarrassed to admit it. Besides, he's so green that he doesn't even know *what* to ask to help himself out. So he keeps quiet about the problem and sends no message.

Identify the step in the communication cycle where the barrier has occurred, describe the problem (e.g., message not properly transmitted), and suggest a solution.

Step where barrier is occurring:

Brief description of problem:

Solution:

Scenario 5

A worker upset about not receiving a promotion is given some instructions by a supervisor who yells across the foundation of a project. He receives the message and understands it, but doesn't acknowledge that he has received it, turns his back, and goes about his work.

Identify the step in the communication cycle where the barrier has occurred, describe the problem (e.g., message not properly transmitted), and suggest a solution.

Step where barrier is occurring:

Brief description of problem:

Solution:

Scenario 6

While being told how to do a certain task, a new worker hears some extremely technical terms and, not being familiar with them, misinterprets their meaning.

Identify the step in the communication cycle where the barrier has occurred, describe the problem (e.g., message not properly transmitted), and suggest a solution.

Step where barrier is occurring:

Brief description of problem:

Solution:

Worksheet 7

Communication Barriers

This worksheet is designed to help you continue developing a personal list of things to do to improve your communication (and supervisory) skills. To answer the questions, refer to section E5 (**Improving Communication Skills**) of Module 2 (**Motivation and Communication**).

1. *Write down the six practical tips for sending oral messages which you believe would be of most value to you personally.*

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

2. *Write down the six practical tips for receiving messages (listening) which you believe would be of most value to you personally.*

1. _____
2. _____
3. _____

4. _____

5. _____

6. _____

3. Write down the six practical tips for **improving written messages** which you believe would be of most value to you personally.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Module 3

Legal Responsibilities

Worksheet 1

OHSA & Regulations

1. Enter, in expanded form, the following citations (see example below):

Example: 43 (2) (d) (iv)-----section **43**, subsection **(2)**, clause **(d)**, sub-clause **(iv)**.

(a) s.28 (1) (a) -----section ____, subsection ____, clause ____, subclause ____

(b) s.38 (1) (e)-----section ____, subsection ____, clause ____, subclause ____

(c) s.54 (1) (m) (ii)-----section ____, subsection ____, clause ____, subclause ____

2. Find sections of the OHSA that refer to “supervisor”.

(a) Section ____, subsection ____, clause ____, subclause ____

Description: _____

(b) Section ____, subsection ____, clause ____, subclause ____

Description: _____

(c) Section ____, subsection ____, clause ____, subclause ____

Description: _____

(d) Section ____, subsection ____, clause ____, subclause ____

Description: _____

3. In what section(s) are workers' responsibilities outlined in the Act?

a) Section _____, subsection _____

clause _____

Description: _____

clause _____

Description: _____

clause _____

Description: _____

clause _____

Description: _____

b) Section _____ subsection _____

clause _____

Description: _____

clause _____

Description: _____

clause _____

Description: _____

clause _____

Description: _____

4. When a new worker joins your crew what are the five most important things you must do according to the Act? (Write a brief description, then identify the section of the Act.)

You must ensure that . . .

- a. _____

[section ____, subsection ____, clause ____]

- b. _____

[section ____, subsection ____, clause ____]

and you must . . .

- c. _____

[section ____, subsection ____, clause ____]

- d. _____

[section ____, subsection ____, clause ____]

- e. _____

[section ____, subsection ____, clause ____]

Worksheet 2

Competent Person & Competent Worker

1. A competent person:

- a) *is qualified because of knowledge, training, and experience to organize the work and its performance,*
- b) *is familiar with this Act and the regulations that apply to the work, and*
- c) *has knowledge of any potential or actual danger to health and safety in the workplace.*

True _____ False _____

2. Identify three locations in the Regulation for Construction Projects where reference is made to a competent person.

- a). Section _____, subsection _____, clause _____, subclause _____

Description: _____

- b). Section _____, subsection _____, clause _____, subclause _____

Description: _____

- c). Section _____, subsection _____, clause _____, subclause _____

Description: _____

3. A competent worker:

- (a) *is qualified because of knowledge, training, and experience to perform the work,*
- (b) *is familiar with the Act and the regulations that apply to the work, and*
- (c) *has knowledge of all potential or actual danger to health and safety in the work.*

True _____ False _____

4. *Identify three locations in the Regulation for Construction Projects where reference is made to a competent worker.*

a) Section _____, subsection _____, clause _____, subclause _____

Description: _____

b) Section _____, subsection _____, clause _____, subclause _____

Description: _____

c) Section _____, subsection _____, clause _____, subclause _____

Description: _____

5. *A supervisor becomes a competent person only when qualified because of knowledge, training, and experience to organize the work and its performance.*

True _____ False _____

Case Study 1

You observe one of your crew not tying off his safety harness when working at the edge of a roof. You have spoken to him before about falls and the need to tie off.

Last week the MOL inspector wrote an “Order to Comply” about workers tying off and you expect him to return any day. You have also been given a notice from the project manager to all subcontractors warning them about making sure workers tie off when exposed to falls greater than 3 metres.

1. Who is legally responsible for making sure that your crew ties-off?

- ☐ The general contractor
- ☐ Your employer
- ☐ You, the supervisor
- ☐ The union
- ☐ The health and safety representative

2. What do you, the supervisor, need to do in order to fulfill your duties?

Case Study 2

Your crew is scheduled to work in the northwest part of the building. When you arrive, the ironworkers are still erecting steel in that area. The superintendent wants your crew to set up in the area below where the ironworkers are swinging and hoisting.

Your crew knows that this is dangerous and they don't want to work in that area until the ironworkers are finished hoisting.

1. Who is legally responsible for ensuring the safety of your crew?

- ☐ The owner
- ☐ The general contractor
- ☐ Your employer
- ☐ You, the supervisor
- ☐ The union
- ☐ The steel erection sub-contractor

2. What do you, the supervisor, need to do to fulfill your duties?

Case Study 3

You have two new workers starting on Monday. They haven't worked for your company before and you don't know whether they have had any prior construction experience.

1. Who is responsible for making the new workers aware of the safety hazards on the job?

- ☐ The general contractor
- ☐ Your employer
- ☐ You, the supervisor
- ☐ The union
- ☐ The health and safety representative

2. What do you, the supervisor, need to do to fulfill your duties?

Case Study 4

The site your crew is working on is a housekeeping nightmare. The MOL inspector has issued an order to have the site cleaned up within 48 hours or he will issue a Stop Work Order.

1. *Who is responsible for complying with this order?*

- ☐ The builder
- ☐ Your employer
- ☐ You, the supervisor
- ☐ Other subcontractors

2. *What do you, the supervisor, need to do to comply with your duties?*

Case Study 5

An MOL inspector has arrived on site and has asked your traffic control person (TCP) about the training she has received. The inspector wants to see the record of the training that was provided.

1. *Who is responsible for providing the information to the MOL inspector?*

- ☐ The constructor
- ☐ Your employer
- ☐ You, the supervisor
- ☐ The union
- ☐ The health and safety representative

2. *What else can the MOL inspector ask to see?*

Case Study 6

Your crew is working in a building and another contractor's crew is using a sealer that smells very strong. Your crew is complaining about the smell, getting headaches, and feeling dizzy.

1. What are your responsibilities, as supervisor, in this situation?

[illegible]

2. Where will you get information about the sealer that the other crew is using?

Case Study 7

You are in charge of a crew on a home-building site and, while going to check on your crew, you find that the home buyers and their family are in one of the units that has just been framed. They are taking some measurements. Another crew is getting ready to sheet the roof and the family is in the way.

1. Who is legally responsible for the safety of the home buyers and their family?

- ☐ The home buyer
- ☐ The general contractor
- ☐ Your employer
- ☐ You, the supervisor
- ☐ The roofing crew
- ☐ The health and safety representative

2. What would you, the supervisor, do to correct the situation?

Module 4

Health and Safety Programs

Worksheet 1

Supervisor Safety Tasks

The detailed listing of responsibilities for every company employee lies at the heart of the successful health and safety program. In large companies, responsibilities are spread over many levels; in small companies, many responsibilities will be undertaken by the same person.

Many company safety policies address written responsibilities for their supervisors with a statement similar to the following.

“The supervisor shall implement, support, and enforce the company safety program at crew level.”

But how does a supervisor actually perform this duty? What are the supervisor’s many specific duties that, if performed, will meet this general duty?

Do some personal brainstorming and complete the following.

What are a supervisor’s specific duties or tasks within a health and safety program? (An example might be delivering safety talks.) Write a list of at least five items below.

Worksheet 2

Enforcement Problems

As a supervisor you are responsible for seeing that all the safety rules and regulations pertaining to your worksite are obeyed. That means you are required to do the following.

- Explain to your workers the legislation that affects them.
- Train your workers to perform their jobs safely.
- Enforce safety regulations.
- Arrange for purchases, maintenance, and repairs needed to restore safe conditions on the jobsite.
- Shut down any operation where the conditions or the methods of operation create a serious risk of injury.

Site supervisors, management, subcontractors, and workers should all be held accountable for following the legislation and jobsite safety rules. But people don't always do what they are supposed to do. Therefore, it is important to anticipate problems with enforcement before they occur.

Do some personal brainstorming and complete the following two questions by using the problem and solution columns on the following pages.

1. *What are the enforcement problems that you, the supervisor, might encounter?*
2. *What can you do to resolve or minimize these problems?*

Module 5

Site Emergencies and Accident Investigation

Worksheet 1

Emergencies and Accidents

1. *In the list below check off any of the emergency and/or accident situations you have been involved in or witnessed.*

1. _____ Injury
2. _____ Death
3. _____ Explosion
4. _____ Fire
5. _____ Structural failure
6. _____ Equipment failure
7. _____ Gas leak
8. _____ Chemical spill
9. _____ Power blackout

2. *On the lines below describe in one or two words some emergency situations or accidents you have been involved in or witnessed.*

1. _____
2. _____
3. _____
4. _____
5. _____

Worksheet 2

Site Emergencies

Complete the following exercises.

1. *Despite your best efforts at supervising, training, and inspecting, unexpected problems may still occur on your worksite. Do some personal brainstorming and list some emergencies or “unexpected events” that could possibly occur on your worksite.*

2. *Being a professional supervisor requires much more than learning information. It requires a continual process of thinking about your responsibilities and exercising your judgement in all kinds of ways. It means drawing on your own and other people’s experiences, and applying a combination of knowledge and experience to your own worksite. Have you ever been involved in a serious accident, as participant, observer, or investigator? If so, briefly describe.*

This image shows a single page from a notebook or ledger. It features ten evenly spaced horizontal black lines across its entire width, providing a guide for writing. The paper itself is plain white, and there are no margins, text, or other markings present.

Worksheet 3

Emergency Response

Read the following case studies, then describe an appropriate emergency response. [Use CSAO booklet **Emergency Response Planning for Construction Projects (B030)** as a reference if necessary.]

1. A company employee is struck down by one of your own vehicles in the yard behind your shop. The site of the accident is a common area for both vehicle and worker traffic. You rush to the scene immediately and find a small crowd has gathered. The victim has no pulse. What emergency response will you take?

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

2. *In the underground parking garage of a partially finished apartment building, there are several gasoline-operated compressors and compaction machines in use. As well, there are dump trucks preparing the bottom floor for rebar and concrete. Two workers complain of headaches and nausea from what appears to be carbon monoxide fumes. There are also other toxic materials being used in the area. What emergency response will you take?*

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

3. *You have just been notified that one of your workers has injured a hand in some machinery. When you arrive at the scene of the accident, you find the injured worker being treated by a qualified first aid attendant. There are several other workers milling around the area. The machinery has been shut down and all production has stopped. What emergency response will you take?*

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Worksheet 4

Legislation

In the spaces provided, answer the following questions regarding legislation.

1. *Section 51 of the OHSA mentions “critical injury.” The cover of the “green book” (OHSA & Construction Regulations) notes that Ontario Regulation 834 is included. This regulation defines the term “critical injury.” On what page in the green book will you find “critical injury” defined?*

Page _____

2. *Section 53 of the OHSA requires the employer to report certain incidents. This is to be done by a notice in writing to the MOL. Accident/incident investigations are one way employers gather the information they need to report. To help an employer know when they must report, Construction Regulation 213/91 lists the current “prescribed incidents.” Find the section in Construction Regulation 213/91 that describes the “prescribed incidents” mentioned above and list at least five.*

3. *Where a Notice of Critical Injury is required by an employer, the OHSA describes special protection that is required for the accident scene. Until an MOL inspector gives permission, only certain activities can take place. Locate the appropriate section in the OHSA and list the activities that are allowed until an inspector authorizes cleanup of the area.*

Section: _____

(a) _____

(b) _____

(c) _____

4. *Regulation 1101 (First Aid Requirements) of the Workplace Safety and Insurance Act contains the minimum standards for providing first aid in the workplace. Using Regulation 1101 as a reference (see your Resource Package), complete the following:*

- (a) *The employer shall ensure that a first aid station is at all times in the charge of a worker . . .*

who: _____

and: _____

- (b) *At a construction site where 20 or more people are regularly employed, the first aid station must have a stretcher.*

True _____ False _____

- (c) *What is the name of the WSIB poster that must be posted in every workplace?*

- (d) *Heavy construction and maintenance equipment must be equipped with a first aid kit.*

True _____ False _____

Explain

Worksheet 5

Accident Investigation

Turn to resource document *Accident Investigation* (CSAO data sheet DS029.) Read *Case History 1: The Slipping Compressor*, then answer the questions below. Be sure to read the columns *What Happened* and *Comments, Reason for Action or Line of Thought* on each page. Also, be sure to read *Accident Matrix 1*, *Accident Matrix 2*, and *Table 7: Sequence of Events*. (To cover all aspects of *Case History 1* you must read pages 14 to 45.)

1. *Who was hurt in the accident and what were their injuries?*

2. *Who asked the superintendent if the elevator should be freed for the ambulance crew?*

3. *In what room and on what floor did the accident take place?*

4. *Who did the superintendent ask to look after the injured worker?*

5. *When the superintendent found that the fitter's chest was still, he wasn't breathing, and he had no pulse what did he immediately do?*

6. *Who did the health and safety rep say was on the roof to signal the crane and what did he say about the signals?*

7. *Who were the six possible witnesses identified?*

8. *What did the superintendent photograph with the Polaroid camera?*

9. *Why did the superintendent and assistant superintendent suspect that the sling got snagged during the operation?*

10. *To help investigate the accident, the superintendent drew up a _____ for all material, equipment, and personnel involved in the accident. (He subsequently filled in all the information he knew on this document.)*

11. *When getting ready to interview, the assistant superintendent met the apprentice in the mechanical contractor's trailer. Why did she do this?*

12. *During the interview, the assistant superintendent ensured that the apprentice could see what she was writing. Why did she do this?*

13. The apprentice didn't want to signal but was told by his foreperson to do it anyway. The apprentice did not verbally refuse the assignment. What right was he unaware of?

14. How did the corner of the concrete base get damaged?

15. To aid in understanding the accident, what document or chart did the superintendent and his assistant prepare after the second matrix was updated?

16. A carpenter who was in the mechanical room stripping formwork from the concrete base offered to help with the installation. The mechanical foreperson allowed him to help. What two immediate causes of the accident were identified as resulting from these actions?

1.

2.

17. The evaluation of the apprentice's knowledge of hand signals was based on a short assessment by the foreperson. What are two indirect causes of the accident that resulted from this action?

1.

2.

18. As you know, the mechanical foreperson, the carpenter, and the fitter all lacked knowledge of proper rigging practices. As a result of his investigation what recommendations did the superintendent make regarding this deficiency or “breakdown in the system.”

Module 6

Construction Injuries and Fatalities

Worksheet 1

Injuries and Fatalities

1. Using the table below and statistics from 1988 to 1992, indicate what percentage of fatal accidents in Ontario was caused by the activities listed.

Table 1: Distribution of Fatal Accidents in Construction

Classification	Ontario *
Fall to different elevation	_____ %
Struck by	_____ %
Electrical contact	_____ %
Reversing vehicles	_____ %
Trench cave-in	_____ %
Caught between	_____ %
Other	_____ %

* based on analysis of 146 fatalities for 1988-92

2. Excluding “struck-by” and “caught-between” fatalities, what are the four main killers in Ontario construction in descending order of importance?

- _____
- _____
- _____
- _____

3. *Most fatalities resulting from falls happen in situations where there is an obvious fall hazard?*

True _____

False _____

4. *According to Ontario construction fatality data, falls from which two of the following lead to the most fatalities? (Please check the two most important.)*

- a. skeletal structure* _____
- b. unfinished floor _____
- c. roofs _____
- d. suspended scaffolds _____
- e. scaffolds _____
- f. ladders _____

* Skeletal structure means things like structural steel/precast concrete structural framework, roof trusses, transmission towers/antennae, and similar open structures

5. *Of the 44 fatalities in Ontario between 1983-92, approximately what percent were the result of powerline contact?*

_____ %

6. *Of the vehicle/equipment types involved in 22 fatal reversing vehicle accidents in Ontario from 1981 to 1990, what percentage of the total was attributed to dump trucks?*

_____ %

7. *Approximately how much does one cubic yard of soil weigh?*

_____ pounds

8. *Most trench cave-in fatalities occur in trenches with a depth of 15 ft - 20 ft (4.5 metres - 6 metres).*

True _____

False _____

9. *In Ontario construction, large firms have a consistently lower frequency of lost-time injuries (LTIs) than do smaller firms.*

True _____

False _____

10. *Looking at the data in Tables 6 and 7, would you say that a trend for injury frequency to decrease as firm size increases was consistent through both the boom in the late 1980s and the recession in the early 1990s?*

Yes _____

No _____

19. *Data seems to indicate that efforts to improve health and safety in the construction industry should target small- to medium-sized companies. How would you rank the following in terms of their likelihood of reducing injuries and fatalities? (Please rank in decreasing order of importance.)*

- _____ Improving job training (including providing new worker orientation).
- _____ Providing health and safety information.
- _____ Developing regulations to address this issue.
- _____ Increasing the number of inspections of small projects.
- _____ Enforcing the Act and the Regulations more consistently on sites where small firms are working.
- _____ Improving the access of small firms to shared occupational health and safety resources.

Answer Book

Module 1

Elements of Supervision

Case Study 1

Charlie, Construction Supervisor

Charlie has 10 years of construction experience but is just starting his fourth month as a supervisor. He plans to take some supervisory training next fall. His crew is currently doing inside finishing on a one-storey shopping mall. It's Monday morning and they are four days behind schedule. Except for two carpenters and one labourer, his crew of eight is new to him. Charlie is expecting two additional carpenters to start this morning, even though his shop has cautioned him that his labour person-hours will run over the limit with the extra two carpenters. George Thompson, the superintendent on the project, has been pushing Charlie hard to keep to the schedule, telling him, "This job has got to finish no later than two weeks from now! If we hold up the opening, we get hit with big penalties. I won't take responsibility if your crew isn't finished. It's your head on the block, so get things moving!" The message is clear, but Charlie can't see how he can meet the deadline, even with two extra crew members expected this morning. The electricians and plumbers are both behind schedule, delaying his work. He's also still waiting to receive a large quantity of special wood paneling substituted at the last minute by the owner's architect.

This case study is designed to establish a framework for thinking about the information presented in Module 1. When reading the various elements in the module you can think about Charlie and about how successful or unsuccessful he is at supervising.

As with many case studies, there is no single correct answer to the questions posed. Case studies are intended primarily to promote thinking.

Q

1. *What are Charlie's problems?*

A

For this answer it's probably a good idea to avoid a lengthy discussion of Charlie's general incompetence. Rather, try to focus on simply listing the specific problems as they arise in the study.

As you start to think about Charlie's problems you should realize that Charlie is not performing the basic functions he should be performing. For example, George's

complaint about his schedule isn't so much about Charlie being two days behind. It's really more about his not informing George *why* he is behind. Making up two days may not be a problem for Charlie's crew, provided the real source of the delay is addressed. Getting the others back on track will go a long way toward solving Charlie's and George's scheduling trouble. But Charlie isn't doing anything about it.

In general, Charlie's problems boil down to five main things.

- He's not planning.
- He's not organizing.
- He's not directing.
- He's not controlling.
- He's not communicating.

Q

2. *What would you do if you were in Charlie's situation?*

A

"Quit!" is what you might be tempted to say, and it's a tempting answer. But if Charlie isn't a quitter, he'll try to resolve his problems. You may have a number of solutions to Charlie's problems but don't worry about ranking your solutions right now; that's really a matter of opinion. Even identifying which problem should be addressed first isn't clear.

To match general solutions to the general problems described in the previous question, Charlie needs to start:

- planning
- organizing
- directing
- controlling
- communicating.

This question tries to make the point that supervisors will inevitably be faced with problems. It's one of their functions to solve them. Getting *started* on solutions can be just as important as listing the problems in the "right" order. The military has a saying

for life-threatening situations. Do *something*, even if it may turn out to be the wrong thing. From a military perspective, doing nothing usually has a tragic outcome. Doing *something* offers a better change of success than sitting paralyzed in the face of looming disaster.

Before becoming a supervisor, tackling problems may be something you didn't have to worry about a lot. Now, however, problems have to be resolved. That's the job of a supervisor. And in most cases you can't look to others for solutions. You will have to generate them yourself.

Q

3. What are the reasons Charlie is in this situation?

A

This question tries to make the point that Charlie hasn't yet made a successful changeover to his new role as supervisor. He has the new title, but is still using former work habits. In fact, there seems to be no identifiable management technique being used. As best, Charlie appears to be "flying by the seat of his pants." Evidence for this conclusion includes the following.

- Charlie has two carpenters standing around at the job box. This is non-productive and is a signal he isn't conscious of his primary task—getting work done through others.
- Charlie appears more worried about potential paperwork in connection with his injured labourer than about how the worker got hurt. His supervisor's role puts him front and centre when it comes to health and safety for his crew. Is he going to assign another labourer to the task and have him injure himself as well? He should be thinking about answers to specific questions—What went wrong? What needs to change to make sure it doesn't happen again? What kind of instructions are being given and are they adequate?
- Charlie isn't communicating with his peers—a serious shortcoming. For instance, he could have defused the safety issue in advance by explaining that new workers were coming and would start on non-hazardous work. Training would be arranged for them if needed. In regard to George's schedule, Charlie seems to have shouldered the problems as if they're actually his own fault. George might have been more sympathetic if it had been explained to him that the paneling, plumbers,

and electricians are all beyond Charlie's control. Only when those problems are fixed can Charlie reasonably be expected to get back on schedule.

- Hiring the two extra men represents questionable thinking. Management expects Charlie's efforts to result in a profit. He is endangering that profit by hiring additional workers who, of course, have to be paid. Yes, he will likely get back on schedule, but *his crew* isn't the reason they are behind. Charlie should have addressed the *obstacles* that are holding him and them up.
- The trim carpenter running out of finishing nails may be an indication Charlie is still relying on others to provide materials for the site. This shows poor planning—or a lack of planning altogether. It is Charlie's responsibility to see that none of his crew is ever out of materials. He has to instruct his workers to keep him informed and then follow up himself to see that there are no supply shortages.
- Charlie says he's rushing and trying to help everyone, but that isn't how supervisors get their job done. Working smarter, not faster, is what supervising is all about. By not leaving himself time to think, to follow up, or to perform the essential functions of a supervisor, Charlie is wearing himself out and courting disaster.
- Charlie has to realize that problems come up on all projects. The need to solve them is one main reason the supervisor exists in the first place. But endless unsolved problems like those Charlie is experiencing should tell him he's in trouble. One thing he could do is ask his manager for advice. Even George might come up with some useful tips if asked. Another thing he could do is speed up his own schedule for taking supervisory training. It looks as if he needs help without delay. Keep in mind that management saw supervisory potential in Charlie and they have a stake in his successful performance. Management may be willing to help with training and advice rather than see him burn out and quit.

Q

4. What should Charlie do to make sure he doesn't get into a situation like this again?

A

There could be a wide range of answers to this question. The main idea here though is to focus on the theme of "getting work done through others" rather than on complicated or vague strategies.

In asking yourself *specific* questions—Why did the nail problem develop? Who was responsible for it?—you will begin to formulate more general questions—When would a supervisor expect to take care of materials problems? Is there a systematic management approach that Charlie could apply to help him solve his troubles?

The following are some points your reading of Module 1 and your thinking about this question should have led you to.

- The job of supervising isn't at all like the job of being a worker. It requires different knowledge and skills.
- Supervisors have to *adapt* their thinking to handle new tasks and responsibilities.
- For most supervisors, good management must be *learned* and *practised*.
- Supervisors have many responsibilities, but their main task is to ensure productivity and profitability. They do this by *getting work done through others*.
- Supervisors can keep themselves and those they supervise on track by using the systematic management approach of *planning, organizing, directing, and controlling*.

Worksheet 1

Options Supervisors Can Use to Deal with Problems

Scenarios with a cut-and-dried “T” solution would probably be unrealistic and unchallenging as learning exercises. Why? Because the problems you are likely to encounter in the workplace will seldom have answers that are simple and/or one-dimensional. For this reason, the “best” method of dealing with the problems described in these scenarios is not necessarily clear cut. You will see that a range of possible treatments is sometimes described. Review your answers for each scenario in view of the comments provided.

Scenario 1

Q

Bill is an excellent tradesperson and an old friend of yours. He works well with the crew and seldom complains. However, he has a habit of quitting just before the cleanup time you've established. Which of the four “T”s (treat, tolerate, transfer, terminate) would you apply to deal with this problem?

A

Consider terminating/treating.

In this scenario the supervisor's credibility is being undermined and he risks losing authority over his crew. Allowing any further violations (tolerating) would spread the behaviour to the entire crew and completely compromise the quitting-time rule. And because a “transfer” approach makes little sense for a simple problem of this kind, “treat” or “terminate” seems like the best approach.

Delivery of the message could be handled a couple of ways. The supervisor could employ his regular approach by making Bill an example in front of his peers to “terminate” the problem. Unfortunately, that would run the risk of losing an otherwise good worker. If Bill accepted the public reprimand and didn't quit, it could help to

restore the image of the supervisor as a tough boss who doesn't even let his friends bend the rules. But there is also a risk—Bill could pack up and leave.

As a less risky alternative, the supervisor could deliver the message in a low-key manner i.e., “treat” the problem. The supervisor could take Bill aside and explain things from his perspective, then warn that a penalty will be applied if Bill does not change his unacceptable habit. This would put pressure on Bill to change his ways if he wants his friendly relationship with the supervisor to continue. Communicating the warning calmly, firmly, and confidentially shouldn't hurt the friendship. Bill is then on the spot to correct his behaviour. If he doesn't, he will be penalized and he will also risk losing the friendship.

Scenario 2



During his daily meeting Jim, the general foreperson, assigned some work and discussed progress on the job. Everything seemed great until he brought up the subject of health and safety. Suddenly he was ranting and raving about too many petty complaints and said he was laying down his version of the law. “The next worker who starts crying about health and safety,” he warned, “is going down the road.” Which of the four “T”s (treat, tolerate, transfer, terminate) would you apply to deal with this problem?



Consider transferring/terminating/treating.

This case is a difficult call. You may think it's more trouble than you need right now and may look for an easy way out.

Such an “out” could be to call in the Ministry of Labour and hope they'll settle the safety question (transfer). This might solve the problem, or at least make it easier for you to avoid firing the worker.

Another approach would be to change the gloves and the mask (treat) and hope the issue doesn't come to Jim's attention. But a cover-up is a dangerous strategy because secrets are few on a construction site.

Tolerating the problem is a non-starter. The worker is pressing his safety complaint and Jim, the general foreperson, has made his drastic policy clear. A collision seems unavoidable. Perhaps you could talk to Jim and convince him that under the circumstances a dismissal (termination) is out of the question. But who knows how this might play out—even for you?

On the other hand, you could do exactly as the general foreperson told you to—fire the worker and let the chips fall where they may. After all, since it was the general foreperson who issued the dismissal order, could it make any difference to you as the supervisor? Well, you should always remember that dismissals involving a health and safety issue are notoriously difficult cases for an employer to win if they end up at the Labour Board. It's now well known that you and the other supervisors have talked over the termination threat and agreed it would create a serious problem. By firing the worker, you may be setting yourself up for a fall.

Scenario 3

Q

Monday was the start of a big construction job to expand an automotive plant. Everybody had to attend a safety presentation by the in-plant safety director. It was a smooth presentation with a clear message: "Accidents don't happen, they're caused. In this plant our workers are one of our most important assets and we intend to do everything possible to protect them. That includes construction workers who come to build new plant facilities for us." Now it's Tuesday morning and the super has just dropped the other shoe. All supervisors will be expected to deliver a 15-minute safety talk every Thursday immediately following the lunch break. Which of the four "T"s (treat, tolerate, transfer, terminate) would you apply to deal with this problem?

A

Consider treating/transferring.

In this case a "treat" solution seems reasonable. As supervisor, you might consider a number of ways of working towards treating the problem: consult with the crew about topics; contact your office or the in-plant safety director for help; base your talks on CSAO safety talks.

These days most supervisors recognize that preparing to deliver safety talks is just another of their many responsibilities. But if you feel totally unequipped to deliver such talks, you should get help from someone with experience in making this type of short, informal presentation.

If you feel totally at a loss, you might want to get someone to fill in for you (transfer) on a temporary basis. But you should probably remember that supervisors are being called upon more and more these days to give safety talks, so it's worth making the effort and learning how to handle the task if you want to succeed in your role.

Scenario 4

Q

This was the fourth time you'd wanted to switch the crew onto another floor, but found that either the area wasn't clear of stored materials, or that the fitters hadn't finished the piping. It wasn't fair that others could mess up your schedule and just shrug their shoulders, then complain loud and long when you didn't finish the insulation so others could get started. After all, the schedule had been thoroughly discussed at the site meetings. The super had promised to have the floors cleared, and the fitter had assured everyone he'd gotten more workers in order to have the areas ready for you. But both your employer and the super are on your case. "What's the hold-up?" they want to know. Which of the four "T"s (treat, tolerate, transfer, terminate) would you apply to deal with this problem?

A

Consider treating/transferring.

On the previous occasions this crew has been held up by someone else. This makes it hard for you to get your work done on time. And later it will result in more pressure on the crew when they are called on to catch up. Action is definitely called for.

As supervisor, you must identify (transfer) those who are actually responsible for causing these delays. If necessary, ask for confirmation of past promises and start dates from information in their site diary. You want to redirect the pressure to speed up where it belongs (treat), without directly pointing a finger of blame at the other party.

You'll need your best communication skills to allow the facts to speak for themselves, without singling out and antagonizing the others involved. Before attending the meeting, consider what you want to say. Jot down some phrases to keep your remarks clear and on track when you speak. Notes will help you stay cool, report the facts, and avoid angry outbursts that might work against you.

Scenario 5

Q

Twice now, you had booked the elevator at a specific time and on both occasions the crew using it before you hadn't been finished. Both times the super had asked if you could wait. When one load of material couldn't go up until the next day, he had even tarped it for you. Nevertheless, it still meant juggling workers around and changing the plan. It was an inconvenience you just didn't need. This third incident had a little twist that called for a tough decision. This time it was the electricians who were going to be another half-hour with the elevator. The super said he realized you had been held up by them twice before. He was prepared to tell the electricians to step aside and let you load, since the time slot was yours. Which of the four "T"s (treat, tolerate, transfer, terminate) would you apply to deal with this problem?

A

Consider tolerating/terminating.

Spoiling a good relationship over a minor incident like this could be short-sighted. The best move may be to put up with the inconvenience (tolerate) and count it as just part of maintaining good rapport with the electricians. The incident could even be used to reinforce your good relationship, with words such as "Oh, since it's you guys, go ahead and finish up. I can work around this for a few minutes."

As supervisor, you might make a point of telling the superintendent that the electricians have done you some favors in the past that more than make up for a little delay. This would make it clear to the super that a favour was being repaid and that you don't allow just anybody to push you off the elevator. This approach will also subtly remind the super that he shouldn't forget the times he has asked you to wait for the elevator in the past. Obviously, you could have the electricians ordered off the elevator (terminate). But that approach doesn't seem worth risking the loss of an excellent relationship.

Scenario 6

Q

It really is true: residential construction is crazy—a tough place for any company to make a buck and a tough place for a supervisor to stay on top of things. The crew is always turning over and either you have more work than you can handle, or everyone is piled into one or two houses trying to find something to keep busy. You were down to just three of your regular crew members and four others you hardly knew when this new episode blew up. For several days you'd been finding empty beer bottles stashed in houses your crew had just left. Which of the four "T"s (treat, tolerate, transfer, terminate) would you apply to deal with this problem?

A

Consider terminating/tolerating.

This is an incident that should not be overlooked. Workers and employers need a framework of rules in order to function well. When either side is in violation, they have to expect to be held accountable.

The workers who have been found drinking have broken the No Booze, No Drugs rule. They know the penalty, so anything less than dismissal undermines the established framework of work principles.

Supervisors may dread this kind of incident, but nevertheless they have to act. The alternative in this case is to tolerate the offence. A forgiving supervisor could decide to view it as only a minor infraction. In the long run, however, this is a mistake for someone charged with maintaining order and getting work done through others.

Such incidents rarely remain a secret. The rest of the crew are going to learn about it and immediately expect a concession for themselves if any other rule gets broken. For you, as supervisor, this is a no-win situation. You lose if the workers are dismissed. But if they aren't dismissed, you've lost control of your crew.

The issue here is about abiding by the rules. At this site both workers and supervisors know the rules. The event requires action, however unpleasant.

Case Study 2

Leadership Styles:

Jack Robinson, Superintendent

Jack Robinson is the superintendent of a large building project. He has just gathered five of his supervisors together for a brief jobsite meeting. He tells the supervisors (Al, Bob, Fred, George, and Charlie) that the project is three weeks behind schedule and everyone on-site is going to have to work harder. He also says that he hasn't planned on hiring any new workers to help. It's up to each foreperson to push the crew harder and make up the time. After these announcements he walked away.

Q

Identify the leadership style being illustrated by each of the supervisors.

A

AL	Do nothing
BOB	Middle of the road
FRED	Team
GEORGE	Buddy
CHARLIE	Dictator

Module 2

Motivation and Communication

Worksheet 1

Workplace Motivators

Q

*In the list below please indicate the 10 things you believe would be most likely to motivate **you** to do your best work.*

A

There is no “correct” answer for this question. Your feelings about what motivates you are, of course, personal and specific to yourself.

Worksheet 2

Workplace Demotivators

Q

In the list below please indicate the 10 things you believe would be most likely to demotivate you at work.

A

There is no “correct” answer for this question. Your feelings about what demotivates you are personal and specific to yourself.

Worksheet 3

Your Application of Workplace Motivators

Q

In spite of how you feel about what motivates you personally, list, in decreasing order of importance, 10 motivators you believe are generally most important to apply in the workplace.

A

There is no “correct” answer for this question. The motivators you chose and the order you put them into are what would work best for you personally. The important thing to remember is that motivating workers is essential if you are to achieve your ultimate goal of getting work done through the work of others.

Worksheet 4

Your Application of Workplace Demotivators

Q

In spite of how you feel about what demotivates you personally, list, in decreasing order of importance, the demotivators you believe are generally most important to remove from the workplace.

A

There is no “correct” answer for this question. The demotivators you chose and the order you put them into are what would work best for you personally. The important thing to remember is that removing demotivators in the workplace is essential if your efforts at motivation are to have any chance of success.

Worksheet 5

Your Communications Strengths

In Module 2 you read that the communications activities listed below were ranked and listed in **descending** order of importance as judged by supervisors. Please disregard that ranking for the moment.

Q

1. *On the following page, under the heading **Your Rank**, list, in **descending** order of importance, each of the communications activities listed below in terms of how good you believe you are, or would be, at doing them as a supervisor. List the activity only and not the corresponding number.*

A

There is no “correct” answer for this question. How you rate your communication abilities is personal to yourself.

Q

2. *Now that you’ve completed your ranking, enter, in the column indicated, the survey rank number from page 1 of this worksheet for each communication activity on your list. Compare your ranking with the survey ranking. How are you at doing those things supervisors believe are **most** important to the job of supervision? And look closely at items 7 to 12 on **your** list. Here you have a custom-made list of communication activities you can concentrate on as you begin to develop improved supervisory skills.*

A

Again, there is no “correct” answer for this question. How well you do those communications activities that were rated highest in the survey will be specific to yourself. As far as items 7 to 12 on your list are concerned, the sooner you begin improving your skills in these areas the sooner you will be able to improve your ability at supervising successfully.

Worksheet 6

Communication Barriers

Scenario 1

Q

A worker yells a question to the foreperson but doesn't take into consideration the strong wind blowing at the time. The foreperson just walks away, never answering because he hasn't heard the message. Identify the barrier that is hindering communication, then describe a short solution to the communication problem.

A

Step where barrier is occurring:

Step Three

Brief description of problem:

Message not properly transmitted

Possible solution:

Yell louder. Try again. First, wave arms to get foreperson's attention, then yell the message.

Scenario 2

Q

A worker concerned about a family problem is worrying and thinking about it so much that he doesn't hear some specific instructions presented at a tool box talk. Identify the barrier that is hindering communication, then describe a short solution to the communication problem.

Step where barrier is occurring:

Step Four

A

Brief description of problem:

Message not properly received

Possible Solution:

Try to leave personal problems at home and pay attention. Ask to have instructions repeated. Ask a fellow worker to repeat instructions.

Scenario 3

Q

A veteran bricklayer is good at his job. But one day the supervisor comes along and wants him to change what he's doing to get a special result for the buyer. Unfortunately, the supervisor describes what he wants rapidly and in a language the bricklayer is not very familiar with. The bricklayer doesn't understand and the work doesn't get done properly. Identify the barrier that is hindering communication, then describe a short solution to the communication problem.

A

Step where barrier is occurring:

Step Two

Brief description of problem:

Message not properly encoded

Possible solution:

Supervisor should speak slowly and in a language and manner that bricklayer can understand. Supervisor should ask bricklayer to repeat instructions back to him to verify that he has understood correctly.

Scenario 4

Q

A worker is new to the job and has no real familiarity with the task he has been asked to do. He knows he doesn't know how to do it but he is too embarrassed to admit it. Besides, he's so green that he doesn't even know what to ask to help himself out. So he keeps quiet about the problem and sends no message. Identify the barrier that is hindering communication, then describe a short solution to the communication problem.

A

Step where barrier is occurring:

Step One

Brief description of problem:

Message not formulated

Possible solution:

Worker should overcome embarrassment to be sure that all instructions are understood. Worker could ask to have the instruction repeated or rephrased to ensure clarity. Supervisor should always verify with new workers that they clearly understand what they are to do. Supervisor could set up a "buddy" system where new workers are paired with experienced workers until the new worker gets the hang of things.

Scenario 5



A worker upset about not receiving a promotion is given some instructions by a supervisor who yells across the foundation of a project. He receives the message and understands it, but doesn't acknowledge that he has received it, turns his back, and goes about his work. Identify the barrier that is hindering communication, then describe a short solution to the communication problem.



Step where barrier is occurring:

Step Six

Brief description of problem:

Uncertainty as to whether message has been received and acted upon

Possible solution:

Worker should try to overcome emotional reactions on the job. Hurt feelings are not a good excuse for someone getting hurt. Workers should pay attention to all communications on the job; it could save their lives. Workers should provide feedback by acting on or acknowledging all communications to ensure that every message is successfully delivered, received, and acted upon.

Scenario 6

Q

While being told how to do a certain task, a new worker hears some extremely technical terms and, not being familiar with them, misinterprets their meaning. Identify the barrier that is hindering communication, then describe a short solution to the communication problem.

A

Step where barrier is occurring:

Step Five

Brief description of problem:

Message misinterpreted

Possible solution:

Worker should ask for clarification (either repetition, rephrasing, or explanation) when communications are not understood. Supervisor should always clarify with new workers that their messages are clearly received and understood. Supervisors should always look for feedback—either appropriate action, acknowledgement or requests for repetition or clarification.

Worksheet 7

Communication Barriers

This worksheet is designed to help you continue developing a personal list of things to do to improve your communication (and supervisory) skills. To answer the questions, refer to section E5 (**Improving Communication Skills**) of Module 2 (**Motivation and Communication**).

Q

1. *Write down the six practical tips for sending oral messages which you believe would be of most value to you personally.*

A

There is no “correct” answer for this question. The tips you chose and their order are what would work best for you personally. What’s important is to recognize that there are specific things you can do to help improve your oral communication skills.

Q

2. *Write down the six practical tips for receiving messages (listening) which you believe would be of most value to you personally.*

A

There is no “correct” answer to this question. The tips you chose and their order are what would work best for you personally. What’s important is to recognize that there are specific things you can do to help improve your listening skills.

Q

3. *Write down the six practical tips for improving written messages which you believe would be of most value to you personally.*

A

Again, there is no “correct” answer for this question. The tips you chose and their order are what would work best for you personally. What’s important is to recognize that there are specific things you can do to help improve your written communication skills.

Use the lists on you created in **Worksheet 7** as a guide to help you improve your communications skills in those areas where you will benefit most.

Module 3

Legal Responsibilities

Worksheet 1

OHSA & Regulations

Q

1. Enter, in expanded form, the following citations:

A

(a) s. 28 (1) (a) section **28**, subsection **1**, clause **a**, subclause ____

(b) s. 38 (1) (e) section **38**, subsection **1**, clause **e**, subclause ____,

(c) s. 54 (1) (m) (ii) section **54**, subsection **1**, clause **m**, subclause **ii**

Q

2. Find sections of the OHSA that refer to “supervisor”.

A

(a) Section **25**, subsection **2**, clause **c**, subclause ____

Description: “. . . appointment of, by employer . . .”

(b) Section **1**, subsection **1**, clause ____, subclause ____

Description: “. . . defined . . .”

(c) Section **27**, subsection ____, clause ____, subclause ____

Description: “. . . duties of . . .”

(d) Section **25**, subsection **3**, clause ____, subclause ____

Description: “. . . employer appointing self as . . .”

Q

3. In what section(s) are workers' responsibilities outlined in the Act?

A

a) Section **28**, subsection **1**,

clause **a**

Description: "... work in compliance with Act and Regulations ..."

clause **b**

Description: "... use or wear equipment PPE, clothing employer requires ..."

clause **c**

Description: "... report absence of or defect in any equipment, etc. ..."

clause **d**

Description: "... report any contravention or existence of any hazards ..."

b) Section **28**, subsection **2**

clause **a**

Description: "... remove or make ineffective any protective device, etc. ..."

clause **b**

Description: "... use or operate any equipment, etc. in way that may endanger ..."

clause **c**

Description: "... engage in any prank, contest, feat of strength, etc. ..."

Q

4. *When a new worker joins your crew what are the five most important things you must do according to the Act? (Write in a brief description, then identify the section of the Act.)*

A

You must ensure that . . .

- the worker works in the manner and with the protective devices, measures and procedures required by the Act and the regulations
[section 27, subsection 1, clause a]
- the worker uses or wears the equipment, protective devices, or clothing that the worker's employer requires to be used or worn
[section 27, subsection 1, clause b]

. . . and you must . . .

- advise a worker of the existence of any potential or actual danger, etc.
[section 27, subsection 2, clause a]
- where so prescribed, provide a worker with written instructions, etc.
[section 27, subsection 2, clause b]
- take every precaution reasonable in the circumstances for the protection of the worker
[section 27, subsection 2, clause c]

Worksheet 2

Competent Person & Competent Worker

Q

1. *A competent person:*

- a) *is qualified because of knowledge, training and experience to organize the work and its performance,*
- b) *is familiar with this Act and the regulations that apply to the work, and*
- c) *has knowledge of any potential or actual danger to health and safety in the workplace.*

A

True ☒ False ☐

Q

2. *Identify three locations in the Regulation for Construction Projects where reference is made to a competent person.*

A

- a) Section 14, subsection 5, clause ____, subclause ____

Description: Detection of hazardous conditions on a project

- b) Section 265, subsection 3, clause ____, subclause ____

Description: Tunnels rescue

- c) Section 266, subsection 3, clause ____, subclause ____

Description: Tunnels training of rescue workers in the proper operation of SCBA

Q

3. *A competent worker:*

- a) *is qualified because of knowledge, training and experience to perform the work,*
- b) *is familiar with the Act and the regulations that apply to the work, and*
- c) *has knowledge of all potential or actual danger to health and safety in the work.*

A

True ☒ False ☐

Q

4. *Identify three locations in the Regulation for Construction Projects where reference is made to a competent worker.*

A

- a) Section **106**, subsection, _____ clause, _____ subclause _____

Description: As signaller

- b) Section **60**, subsection **2**, clause, _____, subclause _____

Description: Confined space

- c) Section **94**, subsection **1**, clause, _____, subclause _____

Description: Inspection of vehicle

Q

5. *A supervisor becomes a competent person only when qualified because of knowledge, training, and experience to organize the work and its performance.*

A

True _____ False ✓

Case Study 1

You observe one of your crew not tying off his safety harness when working at the edge of a roof. You have spoken to him before about falls and the need to tie off.

Last week the MOL inspector wrote an “Order to Comply” about workers tying off and you expect him to return any day. You have also been given a notice from the project manager that went to all subcontractors warning them about making sure workers tie off when exposed to falls greater than 3 metres.

Q

1. Who is legally responsible for making sure that your crew ties-off?

A

- ☐ The general contractor
- ✓ Your employer
- ✓ You, the supervisor
- ☐ The union
- ☐ The health and safety representative

NOTE: “Constructor” was not included on the list of possible answers. If you selected “general contractor”, that party may not be the constructor. If the general contractor were actually the constructor, then that person would have some responsibility.

Q

2. What do you, the supervisor, need to do in order to fulfill your duties?

A

- Inform the crew of the requirements for tying off.
- Ensure that safety equipment is used.
- Record any safety instructions given in your journal.
- Enforce the rules when you see an infraction.

Case Study 2

Your crew is scheduled to work in the northwest part of the building. When you arrive, the ironworkers are still erecting steel in that area. The superintendent wants your crew to set up in the area below where the ironworkers are swinging and hoisting.

Your crew knows that this is dangerous and they don't want to work in that area until the ironworkers are finished hoisting.

Q

1. Who is legally responsible for ensuring the safety of your crew?

A

- ☐ The owner
- ☐ The general contractor
- ☒ Your employer
- ☒ You, the supervisor
- ☐ The union
- ☐ The steel erection sub-contractor

Q

2. What do you, the supervisor, need to do to fulfill your duties?

A

- In this situation, the need to “take all precautions reasonable in the circumstances” applies. Other answers might include:
- rescheduling the work
 - arranging to do other work in another part of the project.

Case Study 3

You have two new workers starting on Monday. They haven't worked for your company before and you don't know whether they have had any prior construction experience.

Q

1. *Who is responsible for making the new workers aware of the safety hazards on the job?*

A

- ☐ The general contractor
- ☐ Your employer
- ☒ You, the supervisor
- ☐ The union
- ☐ The health and safety representative

NOTE: There may be some merit in considering the employer responsible as well.

Q

2. *What do you, the supervisor, need to do to fulfill your duties?*

A

- Advise the workers of hazards associated with the work they will be doing.
- Record this in your journal.
- Provide any specific training or instruction that is required by applicable regulations: e.g., WHMIS, traffic control.

Case Study 4

The site your crew is working on is a housekeeping nightmare. The MOL inspector has issued an order to have the site cleaned up within 48 hours or he will issue a Stop Work Order.

Q

1. Who is responsible for complying with this order?

A

- ✓ The builder
- ✓ Your employer
- ✓ You, the supervisor
- ✓ Other subcontractors

NOTE: All of the parties listed are responsible to some extent.

Q

2. What do you, the supervisor, need to do to comply with your duties?

A

Since the whole site is a problem, the solution has to involve all of the contractors and the builder. Specifically, The supervisor should:

- meet with project manager and employer to determine a course of action
- immediately clean up his own mess (assuming that his mess can be identified)
- notify his employer of the problem if he doesn't have the resources to clean up his area.

Case Study 5

An MOL inspector has arrived on site and has asked your traffic control person (TCP) about the training she has received. The inspector wants to see the record of the training that was provided.

Q

1. Who is responsible for providing the information to the MOL inspector?

A

☐ The constructor

✓ Your employer

✓ You, the supervisor

☐ The union

☐ The health and safety representative

Q

2. What else can the MOL inspector ask to see?

A

An inspector can ask for almost anything to be provided. An inspector can also take samples and evidence as well as require reports to be provided.

Case Study 6

Your crew is working in a building and another contractor's crew is using a sealer that smells very strong. Your crew is complaining about the smell, getting headaches, and feeling dizzy.

Q

1. What are your responsibilities, as supervisor, in this situation?

A

Investigate the problem and ensure that your crew is protected. This may involve providing ventilation, respirators, or re-scheduling the work.

Q

2. Where will you get information about the sealer that the other crew is using?

A

The Material Safety Data Sheet (MSDS), which should be available on site.

Case Study 7

You are in charge of a crew on a home-building site and, while going to check on your crew, you find that the home buyers and their family are in one of the units that has just been framed. They are taking some measurements. Another crew is getting ready to sheet the roof and the family is in the way.

Q

1. *Who is legally responsible for the safety of the homebuyers and their family?*

A

- ☐ The home buyer
- ✓ The general contractor
- ✓ Your employer
- ✓ You, the supervisor
- ☐ The roofing crew
- ☐ The health and safety representative

NOTE: The general contractor, your employer, and you—the supervisor—all have some responsibility, even though the home buyer and family are not “workers.” There are general liabilities that apply to people in control of a hazard.

Q

2. *What would you, the supervisor, do to correct the situation?*

A

- Advise the home buyer(s) that they are on a construction site and are not allowed there during working hours.
- Speak with the general contractor/builder about posting warning signs.
- Point out that if they wish to take measurements, they should make an appointment with the builder.
- Remind them that when they are on a construction site they should have the proper protective equipment.

Module 4

Health and Safety Programs

Worksheet 1

Supervisor Safety Tasks

The detailed listing of responsibilities for every company employee lies at the heart of the successful health and safety program. In large companies, responsibilities are spread over many levels; in small companies, many responsibilities will be undertaken by the same person.

Many company safety policies address written responsibilities for their supervisors with a statement similar to the following.

“The supervisor shall implement, support, and enforce the company safety program at crew level.”

But how does a supervisor actually perform this duty? What are the supervisor’s many specific duties that, if performed, will meet this general duty?

Do some personal brainstorming and complete the following.

Q

1. *What are a supervisor’s specific duties or tasks within a health and safety program? (An example might be delivering safety talks.) Write a list of at least five items below.*

A

- Enforcing safety rules
- Complying with regulations
- Giving tool box safety talks
- Performing site inspections
- Doing accident and incident investigations
- Investigating complaints and work refusals
- Doing job planning
- Performing safety audits
- Providing orientation for new crew members and subcontractors
- Performing hazard assessments
- Setting a professional example

Worksheet 2

Enforcement Problems

As a supervisor you are responsible for seeing that all the safety rules and regulations pertaining to your worksite are obeyed. That means you are required to do the following.

- Explain to your workers the legislation that affects them.
- Train your workers to perform their jobs safely.
- Enforce safety regulations.
- Arrange for the purchases, maintenance, and repairs needed to restore safe conditions on the jobsite.
- Shut down any operation where the conditions or the methods of operation create a serious risk of injury.

Site supervisors, management, subcontractors, and workers should all be held accountable for following the legislation and jobsite safety rules. But people don't always do what they are supposed to do. Therefore, it is important to anticipate problems with enforcement before they occur.

Do some personal brainstorming and complete the following two questions by using the problem and solution columns on the next two pages.

Q

1. What are the enforcement problems that you, the supervisor, might encounter?

A**Lack of training**

You may not be familiar with the rules, regulations, and procedures and/or may not know how to approach people.

New subcontractors

You may be faced with subcontractors following substandard procedures and using poor equipment on site; subcontractors may show a lack of cooperation.

Lack of time

You may spend so much time scheduling work that it ends up taking a priority over safety.

Language

You may find it difficult to communicate.

Lack of support

Management may not support your decision to shut down an operation because of a safety problem.

Attitudes

People may show resistance to your decision or authority or they may wish to avoid responsibility and pass the buck.

Need to make money

Management may not want to shut down an operation over a safety problem because shutting down means a loss of time and money.

Lack of control

You may not know what the quality of the work will be or what procedures will be followed because subcontractors often “sub” work out to other subcontractors.

Lack of resources

You may find that PPE does not meet the latest safety standards but the company does not want to buy new equipment.

Relationships

You may find that buddies or relatives expect to receive special or preferential treatment. (They expect you to use two sets of rules, one set for them and another for everyone else.)

NOTE: You may have come up with some other types of problems that may be encountered.

Q

2. *What can you do to resolve or minimize these problems?*

A

- Create an orientation program for new employees and subcontractors.
- Create a violation/disciplinary policy.
- Provide for penalties and incentives.
- Get communication skills training.
- Establish relationships with management, crew, and subcontractors.
- Conduct job hazard analyses.
- Ask for help (e.g., ask the general contractor to get involved).
- Support others.
- Give recognition to people who deserve it.
- Keep safety visible on site.
- Set an example.
- Promote a team approach to dealing with problems.
- Do better job planning.

Module 5

Site Emergencies and Accident Investigation

Worksheet 1

Site Emergencies and Accident Investigation

Q

1. In the list below check off any of the emergency and/or accident situations you have been involved in or witnessed.

1. _____ Injury
2. _____ Death
3. _____ Explosion
4. _____ Fire
5. _____ Structural failure
6. _____ Equipment failure
7. _____ Gas leak
8. _____ Chemical spill
9. _____ Power blackout

A

There is no “correct” answer for this question. Any emergency and/or accident situations you have been involved in are personal to you.

Q

2. On the lines below describe in one or two words some emergency situations or accidents you have been involved in or witnessed.

A

There is no “correct” answer for this question. Any emergency situations or accidents you have been involved in or witnessed is personal to you.

Worksheet 2

Site Emergencies

Complete the following exercises.

Q

1. *Despite your best efforts at supervising, training, and inspecting, unexpected problems may still occur on your worksite. Do some personal brainstorming and list some emergencies or “unexpected events” that could possibly occur on your worksite.*

A

There is no “correct” answer for this question. Any emergency or “unexpected events” that could possibly occur on your worksite are specific to your own case.

Q

2. *Being a professional supervisor requires much more than learning information. It requires a continual process of thinking about your responsibilities and exercising your judgement in all kinds of ways. It means drawing on your own and other people’s experiences, and applying a combination of knowledge and experience to your own worksite. Have you ever been involved in a serious accident, as participant, observer, or investigator? If so, briefly describe.*

A

There is no “correct” answer for this question. Any experience you may have regarding involvement in a serious accident as participant, observer, or investigator is specific to you.

Worksheet 3

Emergency Response

Read the following case studies, then describe an appropriate emergency response. [Use CSAO booklet **Emergency Response Planning for Construction Projects (B030)** as a reference if necessary.]

Q

1. *A company employee is struck down by one of your own vehicles in the yard behind your shop. The site of the accident is a common area for both vehicle and worker traffic. You rush to the scene immediately and find a small crowd has gathered. The victim has no pulse. What emergency response will you take?*

A

- Take charge; don't panic.
- Give first aid—either you or another qualified first aider.
- Call ambulance—assign this task to another responsible bystander.
- Provide protection—turn off engine of vehicle.
- Guide ambulance—assign another responsible bystander.
- Get name of hospital; find out who will accompany the injured person.
- Identify witnesses.
- Isolate the scene; disperse the crowd.
- Advise management; handle news media.

Q

2. *In the underground parking garage of a partially finished apartment building, there are several gasoline-operated compressors and compaction machines in use. As well, there are dump trucks preparing the bottom floor for rebar and concrete. Two workers complain of headaches and nausea from what appears to be carbon monoxide fumes. There are also other toxic materials being used in the area. What emergency response will you take?*

A

- Take command.
- Provide protection—remove workers to fresh air, turn off vehicles and machines.
- Give first aid.
- Call ambulance.
- Guide ambulance and get name of hospital.
- Advise management.
- Isolate the scene.
- Seek professional advice.

Q

3. *You have just been notified that one of your workers has injured a hand in some machinery. When you arrive at the scene of the accident, you find the injured worker being treated by a qualified first aid attendant. There are several other workers milling around the area. The machinery has been shut down and all production has stopped. What emergency response will you take?*

A

- Take charge.
- Ask first aider if assistance is needed.
- Call an ambulance.
- Guide the ambulance and get name of hospital.
- Advise management.
- Isolate the scene— isolate the machine in question, identify witnesses, disperse crowd, rope off the area

Additional questions to think about:

- We see “Take charge” as the first step in handling these situations, but what does this “look like?” Remember, you must not only take charge/take command, but you must also be seen as being in charge. How will you do this?
- You have said that you will delegate or assign some of these steps/tasks to others. Which others? How will you approach these persons? How will you ensure that they will follow your instructions?

Worksheet 4

Legislation

In the spaces provided, answer the following questions regarding legislation.

Q

1. Section 51 of the OHSA mentions “critical injury.” The cover of the “green book” (*OHSA & Construction Regulations*) notes that Ontario Regulation 834 is included. This regulation defines the term “critical injury.” On what page in the green book will you find “critical injury defined?”

A

Page R-259

Q

2. Section 53 of the OHSA requires the employer to report certain incidents. This is to be done by a “notice in writing” to the MOL. Accident/incident investigations are one way employers gather the information they need to report. To help an employer know when they must report, Construction Regulation 213/91 lists the current “prescribed incidents.” Find the section in Construction Regulation 213/91 that describes the “prescribed incidents” mentioned above and list at least five.

A

Section 11 (1) and any five of the following items.

- A worker falling a vertical distance of 3 metres or more
- A worker whose fall is arrested by a fall-arrest system
- A worker becoming unconscious for any reason
- Accidental contact by a worker or by a worker’s tool or equipment with a live electrical conductor or live electrical equipment
- Contact by a backhoe, shovel, crane, or similar lifting device or its load with an energized powerline rated at more than 750 volts

- Structural failure of all or part of falsework designed by, or required by Regulation 213/91 to be designed by, a professional engineer
- Structural failure of a principal supporting member, including a column, beam, wall or truss, of a structure
- Failure of all or part of the structural supports of a scaffold
- Structural failure of all or part of an earth or water-retaining structure, including a failure of the temporary or permanent supports for a shaft, tunnel, caisson, cofferdam, or trench
- Failure of a wall of an excavation or of similar earthwork with respect to which a professional engineer has given a written opinion that the stability of the wall is such that no worker will be endangered by it
- Overturning or the structural failure of all or part of a crane or similar hoisting device.

Q

3. *Where a “Notice of Critical Injury” is required by an employer, the OHSA describes special protection that is required for the accident scene. Until an MOL inspector gives permission, only certain activities can take place. Locate the appropriate section in the OHS and list the activities that are allowed until an inspector authorizes cleanup of the area.*

A

Section: **51 (2)**

Where a person is killed or is critically injured at a workplace, no person shall, except for the purpose of,

- saving life or relieving human suffering;
- maintaining an essential service (public utility, public transport) or
- preventing unnecessary damage to equipment or property

interfere with, disturb, destroy, alter, or carry away any wreckage, article, or thing at the scene of or connected with the occurrence until permission so to do has been given by an inspector.

Q

4. Regulation 1101 (First Aid Requirements) of the Workplace Safety and Insurance Act contains the minimum standards for providing first aid in the workplace. Using Regulation 1101 as a reference (see your Resource Package), complete the following:

A

Refer to: sections 8 (2) (a) & (b), 9 (2) (a) & (b), and 10 (2) (a) & (b)

- (a) The employer shall ensure that a first aid station is at all times in the charge of a worker
- who works in the immediate vicinity of the station/box
- and:
- who is the holder of a valid St. John Ambulance First Aid Certificate or its equivalent.
- Not more than five workers – Emergency First Aid Kit
 - More than five workers – Standard First Aid
- (b) At a construction site where 20 or more people are regularly employed, the first aid station must have a stretcher.
- True ☒ False ☐
- [Section 10 (1)]
- (c) What is the name of the WSIB poster that must be posted in every workplace?
- (Form 82) In all Cases of Injury/Disease
- Page 1, section 1 (1) (b) (i) and page 12
- (d) Heavy construction and maintenance equipment must be equipped with a first aid kit.
- True ☐ False ☒
- Unless a first aid station is not readily available to the operator in the event of an accident . . .
- [Section 16 (4)]

Worksheet 5

Accident Investigation

Turn to resource document *Accident Investigation* (CSAO data sheet DS029). Read *Case History 1: The Slipping Compressor*, then answer the questions below. Be sure to read the columns *What Happened* and *Comments, Reason for Action or Line of Thought* on each page. Also, be sure to read *Accident Matrix 1*, *Accident Matrix 2*, and *Table 7: Sequence of Events*. (To cover all aspects of *Case History 1* you must read pages 14 to 45.)

Q

1. Who was hurt in the accident and what were their injuries?

A

The fitter was hit in the head (he's unconscious) and the carpenter has his leg pinned under the compressor (he has a bone protruding from his leg.)

Q

2. Who asked the superintendent if the elevator should be freed for the ambulance crew?

A

The assistant superintendent

Q

3. In what room and on what floor did the accident take place?

A

Mechanical room on the 10th floor

Q

4. Who did the superintendent ask to look after the carpenter?

A

The health and safety representative

Q

5. *When the superintendent found that the fitter's chest was still, he wasn't breathing, and he had no pulse what did he immediately do?*

A

The superintendent quickly performed CPR.

Q

6. Who did the health and safety rep say was on the roof to signal the crane and what did he say about the signals?

A

The apprentice was on the roof to signal the crane and there had been confusion regarding his signals.

Q

7. *Who were the six possible witnesses identified?*

A

- Carpenter
- Fitter
- Mechanical foreperson
- Apprentice
- Electrician
- Crane operator

Q

8. *What did the superintendent photograph with the Polaroid camera?*

A

Scratches on the compressor and a chip on one corner of the concrete base

Q

9. *Why did the superintendent and assistant superintendent suspect that the sling got snagged during the operation?*

A

Superintendent and his assistant detected some damage on the roof deck . They believed this made it look as though the sling got snagged during the operation.

Q

10. *To help investigate the accident, the superintendent drew up a _____ for all material, equipment, and personnel involved in the accident. (He subsequently filled in all the information he knew on this document.)*

A

Matrix

Q

11. *When getting ready to interview, the superintendent met the apprentice in the mechanical contractor's trailer. Why did she do this?*

Meeting on witnesses' "turf" makes them more at ease and less defensive.

Q

12. *During the interview, the superintendent ensured that the apprentice could see what she was writing. Why did she do this?*

A

Letting the apprentice see her notes shows that there is nothing hidden in the investigation.

Q

13. *The apprentice didn't want to signal but was told by his foreperson to do it anyway. The apprentice did not verbally refuse the assignment. What right was he unaware of?*

A

The right to refuse the assignment (i.e. unsafe work).

Q

14. How did the corner of the concrete base get damaged?

A

The crew pulled the compressor over, then the compressor fell, damaging one corner of the concrete base.

Q

15. To aid in understanding the accident, what document or chart did the superintendent and his assistant prepare after the second matrix was updated?

A

A sequence of events chart

Q

16. A carpenter who was in the mechanical room stripping formwork from the concrete base offered to help with the installation. The mechanical foreperson allowed him to help. What two immediate causes of the accident were identified as resulting from these actions?

A

1. Carpenter was not trained in unloading heavy material.
2. Mechanical foreperson never questioned the carpenter's training or knowledge.

Q

17. The evaluation of the apprentice's knowledge of hand signals was based on a short assessment by the foreperson. What are two indirect causes of the accident that resulted from this action?

A

1. Apprentice had limited training in signalling. His knowledge was inadequate for the job.
2. Apprentice didn't know he had the right to refuse dangerous work
3. (3rd possible answer) Apprentice's lack of training and education.

Q

18. As you know, the mechanical foreperson, the carpenter, and the fitter all lacked knowledge of proper rigging practices. As a result of his investigation what recommendations did the superintendent make regarding this deficiency or “breakdown in the system.”

A

Recommendations were:

1. Submit a letter to subcontractor and union recommending that safety and rigging refresher courses be mandatory for journeypersons and forepersons. Case history of accident should be part of the course.
2. Tailgate safety talks should include safe rigging practices.
3. Rigging should only be done by experienced and trained workers.

Module 6

Construction Injuries and Fatalities

Worksheet #1

Injuries and Fatalities

Q

1. Using the table below and statistics from 1988 to 1992, indicate what percentage of fatal accidents in Ontario was caused by the activities listed.

A

Table 1: Distribution of Fatal Accidents in Construction

Classification	Ontario *
Fall to different elevation	<u>40</u> %
Struck by	<u>10</u> %
Electrical contact	<u>15</u> %
Reversing vehicles	<u>8</u> %
Trench cave in	<u>6</u> %
Caught between	<u>10</u> %
Other	<u>11</u> %

* based on analysis of 146 fatalities for 1988-92

Q

2. Excluding “struck-by” and “caught-between” fatalities, what are the four main killers in Ontario construction in descending order of importance?

A

- (c) Falls to different elevation
- (d) Electrical contact
- (e) Reversing vehicles
- (f) Trench cave-ins

Q 3. Most fatalities resulting from falls happen in situations where there is an obvious fall hazard.

A True ☒
False ☐

Q 4. According to Ontario construction fatality data, falls from which two of the following lead to the most fatalities? (Please check the two most important.)

A skeletal structure* ☒
unfinished floor ☒
roofs ☐
suspended scaffolds ☐
scaffolds ☐
ladders ☐

* Skeletal structure means things like structural steel/precast concrete structural framework, roof trusses, transmission towers/antennae, and similar open structures

Q 5. Of the 44 fatalities in Ontario between 1983-92, approximately what percent were the result of powerline contact?

A 60 %

Q

6. Of the vehicle/equipment types involved in 22 fatal reversing vehicle accidents in Ontario from 1981 to 1990, what percentage of the total was attributed to dump trucks?

A

68 %

Q

7. Approximately how much does one cubic yard of soil weigh?

A

2700 pounds

Q

8. Most trench cave-in fatalities occur in trenches with a depth of 15 ft - 20 ft (4.5 metres - 6 metres).

True

False ✓

Q

9. In Ontario construction, large firms have a consistently lower frequency of lost-time injuries (LTIs) than do smaller firms.

True ✓

False

Q

10. Looking at the data in Tables 6 and 7, would you say that a trend for injury frequency to decrease as firm size increases was consistent through both the boom in the late 1980s and the recession in the early 1990s?

AYes ☒No ☐**Q**

11. Data seems to indicate that efforts to improve health and safety in the construction industry should target small- to medium-sized companies. How would you rank the following in terms of their likelihood of reducing injuries and fatalities? (Please rank in decreasing order of importance.)

_____ Improving job training (including providing new worker orientation).

_____ Providing health and safety information.

_____ Developing regulations to address this issue.

_____ Increasing the number of inspections of small projects.

_____ Enforcing the Act and the Regulations more consistently on sites where small firms are working.

_____ Improving the access of small firms to shared occupational health and safety resources.

A

There is no “correct” answer for this question. Any emergency and/or accident situations you have been involved in are personal to you.