BC **Forest Safety**

Basic Incident Investigation

Trainer's Manual - v. 1.6

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INFORMATION FOR THE TRAINER

About the BC Forest Safety Council

The British Columbia Forest Safety Council (the Council) was created in September 2004 as a not-for-profit society dedicated to promoting forest safety in the sector. The initial focus and tasks of the Council were set out in the report of the Forest Safety Task Force, which created a strategy to dramatically improve the safety record of the BC Forest Sector.

The Council includes all of the major forestry organizations and is supported by WorkSafeBC and the Government of British Columbia. The Council is the forest industry's health and safety association and acts as a certifying partner within WorkSafeBC's Certificate of Recognition (COR) program.

The Council helps employers and employees get the information and training they need for the work they do. The Council provides many resources, such as safe work instructions that people can adapt for their site and policies that can guide a company's day to day activities, supervisor training for people directly overseeing workers, and occupational training for new hand fallers.

The Council's goal is for knowledgeable employers and well-trained workers acting together to improve safety on the job. The Council is fully committed to creating a culture of safety across the forest sector.

The values, beliefs and commitments that form the basis of the Council and its work are set out in the Forest Safety Accord.

About A Safety Culture

Creating a culture[1] of safety was identified as a key component of improving safety in the forest sector in 2004 when the BC Forest Safety Council was formed. In such a culture, safety is treated as an overriding priority and a shared responsibility throughout the sector.

A company's culture is the environment that surrounds its workers all of the times they are at work. Culture is a powerful element that shapes a worker's enjoyment, work relationships, and work processes. Culture is something that cannot actually be seen except through its physical expression in the workplace.

A company's culture can be seen in the actions of workers, the actions of management and the quality of product and customer relationships.

In many ways, a company's culture is like its personality. In a person, the personality is made up of the values, beliefs, underlying assumptions, interests, experiences, upbringing, and habits that create a person's behaviour. In a company, culture is made up of the collective values, beliefs, underlying assumptions, attitudes, and behaviours shared by a group of people**.** It is the behaviour that results when a group arrives at a set of – generally unspoken and unwritten – rules for working together.

[1]Culture refers to the values, beliefs, underlying assumptions, attitudes and behaviours that are shared by a group of people.

An organization's culture is influenced by the life experiences each employee brings to the organization. Culture is especially influenced by the organization's founder, executives, and other managerial staff because of their role in leadership, decision making and strategic direction.

Company culture is represented in a group's:

- language,
- decision making,
- symbols,
- stories and legends, and
- daily work practices.

Something as simple as the objects chosen to be on a supervisor's desk tells you a lot about how employees view and participate in an organization's culture. Bulletin board content, the company newsletter, the interaction of employees in meetings, and the way in which people collaborate, speak volumes about your organizational culture.

Every worker has the opportunity to have an influence on the culture of a company. The person attending this course – whether the company owner, safety person or another worker – has the ability to influence the culture of the company toward safety when he/she returns to work. One of the goals of this course is to inspire your course participants to commit to having that influence on their company.

How will people know when they have successfully created a culture of safety within their company?

- Leaders provide consistent vision and messaging about the values of the company. They "Walk the Talk."
- Leadership has an unwavering commitment to zero injuries and to a reduction in injuries and to continually pushing itself to find new, sustainable ways to keep workers safe and productive. Leaders create avenues for worker input and influence, by providing opportunities for workers to be engaged in the safety program at work, for example, and by fostering openness in communication. They continually promote the message of "Nothing a worker does is worth getting hurt for."
- Engaged employees are empowered to speak up if they do not have the tools to do the job safely because they know they will be supported by all levels of management.
- Employees know that the financial, emotional and physical costs inherent in an incident are too high a price tag for the cost of doing business.
- A culture of safety is fully integrated into the company's systems, where the action taken to 'tend to the system' makes sense and drives meaningful data and improvements. It fosters open communication between the critical players and sets clear expectations about what kind of behaviour is appropriate.

Changing the culture of any organization or sector is an ongoing process that typically occurs over several years.

About This Course

The Basic Incident Investigation course provides supervisors, safety coordinators and others working within the forest industry with a basic understanding of the methods and tools employed in order to conduct effective incident investigations. The one day course provides a level of knowledge about the incident investigation processes required to lead an incident investigation that identifies causes and drives effective corrective or preventive actions.

The Basic Incident Investigation course does not go into the level of detail required to allow students to lead complex investigations with serious potential consequences such as legal liability. The online Serious Incident and Fatality Investigation Course can be recommended to participants who are seeking a course that involves this level of detail.

This course will be reviewed and revised periodically to ensure it continues to best meet the needs of the BC forest sector and the intentions of the BC Forest Safety Council in cultivating safety.

This course is laid out in the following sections:

SECTION 1: INTRODUCTION – Set up a classroom environment where the participants are comfortable speaking freely and contributing their experience, opinions and challenges.

SECTION 2: THE “WHY” OF INVESTIGATIONS – Assist participants to understand and connect to the importance of investigations for themselves, and see the connection between conducting investigations and determining effective corrective actions, and reductions in both the number and severity of incidents.

Main components:

- Doing the Right Thing
- Doing What’s Good for Business
- Legislation and regulations

SECTION 3: WHEN TO INVESTIGATE – Review the legislative and regulatory requirements for reporting and investigating incidents.

SECTION 4: WHAT TO INVESTIGATE – Examine various tools and forms available to support the incident investigation process.

SECTION 5: HOW TO INVESTIGATE – Lay the groundwork for effective investigations and demonstrate effective corrective actions that will reduce the occurrence of incidents.

SECTION 6: INVESTIGATION PRACTICE – Provide your participants an opportunity to practice investigation skills in an environment of coaching and feedback.

SECTION 7: COURSE WRAP UP – Review the course objectives.

About This Trainer's Manual

This manual is laid out to follow the order of content as also provided in the PowerPoint slide deck. In the Lesson Plans, you will find each lesson lists the slides that pertain to that lesson at the start. As you work through the material you will want to also have the following for easy reference:

- The PowerPoint presentation itself.

The overall training package is comprised of a few different components:

- Your Trainer's manual, which includes:
  - This document with the lesson plans;
  - A copy of the forms, handouts and activity sheets to be used in the course – found in the Resources section at the back of the Trainer's Manual (and the Participant Manual);
  - Space for you to insert additional resources; and
  - A copy of the Participant Manual for your reference.
- The Participant Manual – one for each participant in your course
- The PowerPoint Presentation
- 10 video resources are used in this course:
  1. Video1-Homecomings.mp4
  2. Video2-EmployersStory.mp4
  3. Video03-IncInvReporting.mp4
  4. Video04-ObjectiveAnalysis.mp4
  5. Video05-InterviewingSkills.mp4
  6. Video06-PickupCrash.mp4
  7. Video07-WindEvent.mp4
  8. Video08-ATVUnloading.mp4
  9. Video09-TruckLoading.mp4 (OPTIONAL)
  10. Video10-FallerInjured.mp4 (OPTIONAL)
- Website resources (forms and checklists)

You will also likely want to have a copy of the BC Occupational Health and Safety Regulations with you for reference. These regulations can be accessed from the WorkSafeBC site at this link: https://www.worksafebc.com/en/law-policy/occupational-health-safety/searchable-ohs-regulation/ohs-regulation

The Regulations are available in the following formats:

- As a searchable online reference, at the above link;
- As a mobile phone app for Apple and Android devices.

Feel free to include your own materials that you find helpful in your training sessions. If you have a resource that you find effective, share it with us so that we can consider including it in the Manual.

If you have materials that you would like to see considered for the future Incident Investigation course, please make note of them and send these materials in with explanatory comments to BCFSC.

Please do not revise the base PowerPoint Presentation other than including your contact information on Slide 2. You can, however, add to and modify the slide speaking notes in the presentation.

Your Role as a Trainer

You play an important role in helping to create a safer forest industry. Your ability to pass on your knowledge to your participants and instill an understanding and appreciation for a focus on safety will save lives.

You are also an ambassador of the BC Forest Safety Council and how you are perceived will affect the view that forestry employers and employees have toward the Council and its work.

Philosophy – the material in this course is best taught in an interactive format. Some Activity and Video opportunities are currently flagged in the Lesson Plans.

Look for opportunities throughout the course to brainstorm and discuss approaches with your participants. Much of the information you are teaching will make sense to your participants, and in many cases, you will be able to solicit the solutions and best practices for their safety programs directly from them.

If your participants come up with ideas and solutions themselves, they are more likely to remember and put them into practice, so utilize this approach in your teaching whenever possible.

Here are a few things to keep in mind:

Professionalism – You are a role model for your participants. They will look to you to see what your attitude is toward safety.

Course Content – It is important that the core content components of the BII course are taught regardless of where a participant takes the course in BC. We request you do your best to teach all the core course content and do not alter the slides of the PowerPoint presentation. We have provided some *OPTIONAL* activities and videos for you to use as you wish, and please feel free to suggest other options to include in this manual. Feel free to modify the speaking notes section of the PowerPoint.

Real life examples – Examples are very effective for generating awareness and appreciation for the importance of safety programs and systems. However, it is important to remember when using real scenarios as teaching tools that your participants might know some of the people who were involved in such incidents or fatalities, and in some cases, may find the discussion upsetting. Be aware of the mood of your class; if you notice someone is uncomfortable, it would be good to check in with them and potentially modify your approach if necessary. You can do a subtle check-in in a number of difference ways, such as:

- Call a mini-break (5-10 min) and catch the individual before they leave the room, asking them if everything is ok or if they need you to do something differently;
- Ask your participants to spend a few minutes reflecting on a question, and check in with the individual in the same manner.

Acronyms – Although safety acronyms roll off your tongue easily, be aware that your participants may not be very familiar with the terms. Use the term rather than the acronym whenever possible.

Get to know your participants – Pay attention to what they tell you during the introductions and throughout the course so that you can tailor your questions and discussions to their business.

The Council's Activities – You will need to be as knowledgeable as possible about recent Council developments as your students may ask about them. You might find getting in touch with a member of the Council prior to delivering the course helpful.

Answering Questions – A significant portion of your training time can be taken up by specific questions from students. You will need to be prepared to answer these questions in class (if in your assessment it is something that all students can benefit from), or else allow for time during breaks to answer these questions one on one.

Tough Questions – If you are asked a question that you do not know the answer to, you can call on the Council for assistance. If possible, contact the Council during a break to get the necessary information. This will allow you to share the answer with the entire group before the end of the course. If it is not possible to get the information before the end of the course, get the participant's name and phone number or email address, and follow up with a Safety Advisor or someone from the Training Team to find the answer.

Parking Lot – You may get questions that are off topic, or you may find a discussion is going on longer than you are able to accommodate in the course. You can write questions or concepts on a flipchart labelled "Parking lot," to be revisited or followed up with later. If there are items that need to be followed up on outside the course, make sure you let the participants know how you intend to address these.

The Council Has Your Back – If something comes up during your course that you are not sure about, please get in touch to discuss. The Council is here to provide support to you as a trainer and we want to know how it is going for you out there. If we know what is working well and what isn't, we can continue to improve the courses offered by the council and the resulting impact we collectively have on safety in the forest sector.

Opportunities and Challenges

Build Rapport and Relationship with Participants

Greet and mingle with the group; be responsive to participants and sensitive to the emotions of participants and the "mood of the group"; regularly "read" the group; watch and respond to nonverbal signals; put the group at ease.

Adult Learners and Experiential Learning

Your participants bring a wealth of experience to the course that you can draw upon – use questions, discussions, and other techniques to relate their experiences to the topic being taught. Engaging learners in activities, case studies and activities helps them to integrate the topic and apply it to their "real world experience" and how they can apply the learning to their work.

Attitude of Participants

If a participant does not want to be there and is there because he/she was told they had to attend, you are best to address it privately at the beginning of the course. They will resist learning and potentially drag the entire group down unless you give them an opportunity to be heard.

Tips

- Allow the participant to express their frustration and acknowledge them for coming anyhow. Sometimes all that a person needs is acknowledgement to enable them to settle in.
- Let them know that you think they will find the course useful, even though they may not have attended willingly.
- Ask them if they are willing to give the course a chance.
- Ask them to check in with you periodically or to let you know how they are doing.
- If they are disruptive after you give them a chance (or several) to alter their attitude, you can suggest they leave and attend the course at another time.
- As a trainer, you do not have to put up with disruptive, unruly participants, in particular if the behaviour is interfering with the experience and learning of other participants in the course.

Concerned participants

One of your participants may have an unresolved issue that has been bothering them. If possible, see if you can talk to them and resolve it for them early in one of the breaks. Doing so will lead to better course participation.

Overly talkative or dominant participants

Sometimes you will have a participant who is interfering with the ability of others to participate.

Tips

- Pair this participant up with someone who is able to exert influence over them and limit their talking.
- Tell the participant that you appreciate their contribution, but you want to be sure others have an opportunity to offer their ideas as well.
- Suggest that you take the conversation offline, and ask the participant to talk to you at a break time if they have something they want to discuss.

Quiet participants

There will be some quiet people who may not appear to be really engaged in the course. You may need to direct specific questions at them to get them participating. When you lead the introduction section, pay attention to the information your participants give you, so you can tailor your questions and discussions to their company.

Logistics

Below we have provided some points about course logistics.

Group Size

The size of your group will have an influence on the class activities, and also the dynamics of the group over the course of the day.

In general, for Council courses, the maximum recommended group size is 20 and the minimum group size is 8. If you find you are running a course with fewer than 8 participants, you will need to think about how this might affect some of the activities.

Scheduling, Booking of Facilities, etc.

Gary Banys from the BC Forest Safety Council takes care of course scheduling and booking of trainers.

Course Registrations

Patty Bergeron is responsible for taking enrollments for sessions.

Instructors need to ensure that the “Participant Sign in Sheet” and “Class List” match. The “Participant Sign In Sheet” is signed by each participant when they arrive at the training. The “Class List” is the list of participants that is emailed to the instructor prior to the training. Trainers need to communicate discrepancies with Patty. If the lists don’t match, this results in a number of emails/phone calls to match the records.

If the information on the two documents doesn’t match, instructors can rectify this by communicating with Patty:

- No shows are fine to handle via email at the end of the day/course.
- If a company sends a substitute worker, the BCFSC needs to know their name and contact information. Anyone in this situation needs to contact Patty anytime during the course and provide this information.
- If someone else is in attendance that is not on the list and there is room for them, they need to contact Patty at the first break on the first day to enrol.

If instructors can email a copy of the reconciled “Participant Sign In Sheet” directly after the course it is appreciated. Course materials should be mailed as soon as possible and arrive in the office no later than 2 weeks after the course.

Timing of Course

You have some flexibility with timing.

Once you have started the course, you can adjust the timing of coffee and lunch breaks as long as you have the agreement of all your participants. For example, you could arrange to have a half hour for lunch rather than one hour.

Cancellation Policy

For most courses, the Council will decide two weeks ahead of time if the course will run. This decision is based on a few factors including primarily the number of participants registered in the class. If you are aware of specific events (poor weather, road closures, missing course materials, sickness, etc.) that may prevent one of your courses from going ahead, please contact Gary Banys as soon as possible.

Things to Bring/Getting Set Up

Things to bring: projector, laptop, extension cords, videos and other content on flash drive (in the event no internet is accessible), your trainer manual, and your Council contact list. You will want to be sure to have all the props and other materials for the afternoon’s practice investigation sessions.

Any props needed for exercise/scenarios will be supplied by the BC Forest Safety Council.

The printed material, name cards, and pens are usually shipped to the location. You should confirm this with Gary prior to your course.

Arrive early for set up. Have everything set up prior to students arriving so that you have the opportunity to chat and get to know them prior to the start of the course.

What to do when things go wrong (Power failure, lack of internet, etc.)

You should be prepared to teach the course using just the printed material that is provided to you. The videos have been provided as a MPG4 file which you can run from a flash drive on your laptop.

If there is a power outage or something that potentially makes the classroom area unsafe or unsuitable for teaching, contact us and we'll come up with some alternatives.

Minimum participant numbers to run the course

This depends on the course and frequency of course offerings in a particular area.

Recommended Room Set Up Options

Set up the room to maximize the ability of the participants to interact.

A "U" shaped set up for the tables seems to be the optimal arrangement where possible.

Videos and Internet Capability

Videos used in this course are available in 2 formats (as available):

1. MP4 or WMV file formats provided by BCFSC on a USB flash drive or similar.

Instructors will need to copy these video resources ahead of time onto the desktop of your laptop and create direct links in the PowerPoint slides. For assistance with this, contact BCFSC.

2. Several videos are in an online format which requires a good internet connection. To launch, click on the video graphic on the slide page, or click on the **highlighted web link**.

Confirm you have Wi-Fi access (such as sign on information and passwords) with the facility in advance.

Safety Information

You will want to confirm safety information with the facility contact ahead of time if you are not familiar with that particular venue, such as location of fire exits and fire extinguishers, muster points, first aid coverage, emergency call out, etc.

Allergy information is collected from course participants when they enroll in the course. This information is communicated to the food caterer.

Course Follow Up and Administration

You will need to send the “Participant Attendance List” into the Registration Department at the Council. They will then send out the certificates to the course participants.

Emergency Contact Information

The main emergency contact is Gary Banys at the Council:

Cell: 250-735-0848 (best number)

Office: 1-877-741-1060.

If you cannot reach Gary, you can try contacting either Allison Thompson or Gerard Messier at 1-877-741-1060.

SECTION ONE: INTRODUCTION TO THE COURSE

Trainer's Notes

The material in this section is designed to help your participants to settle into the course. You will be letting them know what they can expect from the course and answering any questions or responding to any concerns that they might have. You will give them some time to introduce themselves and talk very briefly about why they are attending.

This section of the course is important because:

1. You are setting the stage for the participants.
2. You are creating an environment where the participants are comfortable speaking freely and contributing their experience, opinions and challenges.

Unit 1: Course Overview

Background

In this unit, you will give your participants a quick overview of the course, so they have an idea of what to expect.

Instructional Points

SLIDE 1 – Use the PowerPoint presentation as a guide.

SLIDE 2 – Show your participants the Welcome slide, with your name and contact information on it. Let them know you will talk a little more about yourself shortly.

SLIDE 3 – Land Acknowledgement

- Read out the general land acknowledgement. If you know the name of the first nation(s) where you and the participants are located, make sure to acknowledge those nations.

  We respectfully acknowledge these unceded ancestral lands, upon which we live, work and play.

  We are honoured to have the opportunity to engage and work with First Nations, Inuit, and Métis across B.C.

SLIDE 4 – Show the Safety Plan/Briefing slide. Provide a safety orientation and discuss the safety plan for the venue. It is important to do this as a first step to demonstrate the desirable focus on safety.

Share the relevant information about evacuation plan, muster points, location of first aid kit and fire extinguishers, emergency call out, etc.

SLIDE 5 – Show the Overview slide.

- Instruct your participants to fill in the sign in sheet, and let them know that it is the attendance sheet for roll call if evacuation is required.
- Cover off the following topics:
    - The schedule for the day
    - Breaks
    - What they should do with their cell phones
    - What your expectations are for participation and confidentiality
    - How the course will be graded – participation in discussions and case studies, **no exam**

Unit 2: Icebreaker: Introductions

Background

In this unit, you will briefly introduce yourself to your participants, and allow them to introduce themselves.

Instructional Points

SLIDE 6 – with the Introductions slide displayed, ask participants to introduce themselves by answering the following questions:

- Who they are
- Who they work for and what is their position
- Have they been involved with investigating incidents before?
- What they hope to gain from this day

- Write down their expectations for the day on a flipchart, and review these at the end of the day.

PARTICIPANT MANUAL

- You can suggest your participants take a couple of minutes to write their expectations for the day under “My Goals” in their manual.
- Use this opportunity to speak briefly about their Participant Manual, and that it is a reference that they can use to take notes.
- After your participants have introduced themselves, provide some information about your background, why you teach this course, etc.

- Speak briefly about your background and why you are a trainer for the BC Forest Safety Council. You do not need to overwhelm them with the depth of your safety background; just the highlights so they know you are qualified to teach this course.

SLIDE 7 – Show your participants the Course Objectives slide, and review with them the overall objectives for the course. Relate the course topics to the participant expectations flipchart list – some of their expectations may not be specifically addressed in this course – note other courses that may address their interests (e.g. Serious Incident and Fatality Investigations online course, Joint Health and Safety Committee training program, Forest Supervisor program, etc.).

SECTION TWO: THE "WHY" OF INVESTIGATIONS

Trainer's Notes

The material in this section is designed to help your participants to understand why it is important to conduct investigations of incidents, near misses and close calls. For your participants, it is important to understand that near-miss investigations lead to a reduction in incidents / injuries and that this leads to improvement in quality, production, and worker morale.

This section of the course is important because:

1. Your participants will be more likely to conduct investigations if they understand and connect to the importance of investigations for themselves.
2. By the end of the unit, your participants will see the connection between conducting investigations and determining effective corrective actions, and reductions in both the number and severity of incidents.

Unit 3: Connection between Investigations and Incident Reduction

Background

In this unit you will share with your participants the linkages between investigating incidents and the likelihood of future incidents.

In this section, there is some optional content:

1. Close Call Reporting
2. Safety Statistics

Instructional Points

- Discuss with your participants their workplaces and the influence incident investigations have on the likelihood and severity of incidents in the workplace.

SLIDE 8 – Show examples of a safety pyramid. You can include some or all of the background points, as you wish. Be sure to cover the key points. These graphics are also in their **Participant Manual**.

Source: Frank E. Bird & G. L. Germain, Loss Control Management: Practical Loss Control Leadership (Oslo, Norway: Det Norske Veritas,1982)

Background on this graphic:

- The pyramid comes from a study of industrial accidents done by Frank Bird Jr. (then the Director of Engineering Services for the Insurance Company of North America) & George Germain. The study is documented in the book "Practical Loss Control Leadership."
- It shows that a serious incident is built on the foundation of many less severe incidents.
- Ratio studies like this were of certain large groups of organizations at a given point in time. It does not necessarily follow that the ratios will be the same for any particular occupational group or organization.
- The significant point is that major injuries are rare events and that many opportunities are afforded by the more frequent, less serious events to take actions to prevent the major losses from occurring.

Key Points

- Efforts at eliminating incidents at the lower levels does not guarantee elimination of incidents at the higher level of the pyramid.
- The focus needs to be on recognizing potential injuries and incidents, and reporting and following up on ALL incidents and injuries as the basis for reducing 'risk taking' behaviours.
- Investigating incidents with no visible injury or damage (such as close calls) reduces the size of the base of the pyramid.

- This results in fewer property damage accidents, fewer minor injuries and fewer major injuries.
- Make the point to your participants that the graphic does not mean, for example, that a company will have 600 incidents with no damage or injuries before 1 fatality (thus allowing the business ample time to make 'corrections'); any business can enter the pyramid at any point in time.
- Stress the value of learning and making improvements to our systems at the lower levels of the pyramid.
- Discuss how conducting incident investigations would act to reduce the size of the base of the pyramid. This will reduce the serious incidents and fatalities.
- Ask them where on the pyramid they would prefer to spend their time – that is, investigating a fatality, or alternatively investigating a near miss and learning from the findings in order to prevent it or something more serious from happening again.
- Point out that conducting investigations and developing corrective actions at the close call and at-risk behaviour level will lead to changes that may prevent future incidents.

Optional Content 1: Close Call Reporting

- Discuss the concept that as close call reports increase, so does the opportunity to investigate them.
- Talk about how to encourage workers to report those close calls – what is the avenue at your worksite for workers to report those? Is it a close call form handed to the safety committee or something else?
- As you investigate, you are able to put in place corrective actions related to these investigations.
- This would have the impact of reducing the number of incidents over time.
- As well, by increasing the reporting of close calls and near misses, there is an increased awareness of the hazards and an increased focus on safety, which also leads to fewer incidents.
- At this time, you can also talk to your participants about the different levels of investigations. For example, they are required to do a full investigation on close calls with a potential for serious injury but other close calls usually don't require as in depth of an investigation.
- There may be a need to investigate other close calls.
- However, let them know it is important to investigate the minor close calls if they have a recurring pattern, because that is a flag that there is something wrong with the work process, for example.
- Reporting close calls and investigating incidents are part of a culture of safety.

- When a close call is reported, it makes it possible to investigate the incident, and in turn identify the causes of the incident. This then makes it possible to make changes to help prevent the same incident from occurring again.

Optional Content 2: Safety Statistics

You could review some key industry-recognized safety statistics with your participants.

Explain the formulas that go with each of these rates.

These formulas are a way to capture statistics and ensure they are applied consistently.

MIR – Medical Incident Rate

An industry measure

Does not include first aid

Formula: (Medical Treatment + Restricted Work + Lost Time Cases) x 200,000 hours / Exposure Hours

Medical Treatment a doctor gives you treatment that could not be given by a first aid attendant

SR – Severity Rate

Seen by some to be the most important measure

Formula: (number of lost days) x 200,000 hours / Exposure hours

LTR – Lost Time Rate

Not used too much anymore, LT cases is built into MIR

Lost time cases x 200,000 hours / Exposure hours

Note that these statistics track injuries only, not close calls.

Tracking this kind of information can be a great opportunity for companies to start tracking incidents & costs towards recognizing patterns and trends.

It can be useful to pay attention to this kind of information and track statistics.

It also provides an introduction to your participants about these terms and the safety vocabulary.

Also, it may be helpful for them to know that larger companies use these terms and track this information.

However, acknowledge that many of your participants work in smaller companies and may not be able to find the time to track this kind of information.

Unit 4: Reasons to Investigate Incidents

Background

This unit introduces the idea that doing what's right and what's good for business should complement each other.

Instructional Points

SLIDE 9 – Show "the slide "Doing What's Right is Good for Business."

- Explain that doing what is right is also good for business.
- Doing what's right relates to moral, ethical, personal, family, logical or social reasons, reasons of conscience, related to people, relationships, etc.
- Doing what's good for business relates to the costs of incidents.
- Start with a video that relates to doing what's right.

Show the video below:

- "Homecoming" – also titled: "Waiting for Dad" Video – (Time 0:48)

  WorkSafe Victoria (Australia)

  https://www.youtube.com/watch?v=m64TxQdBieI

Key Points

- Being safe – or unsafe – at work has consequences at home and in the community.
- It's good to remember our priorities. Injuries/fatalities aren't just a number on a spreadsheet. They represent real people who have families.

Unit 5: Doing What's Right

Background

In this unit, you will lead a discussion with your participants about reasons for conducting incident investigations, such as those that are related to doing what's right – moral, ethical, personal, family, logical, social, or health reasons; reasons of conscience; or reasons related to people, relationships, etc.

Instructional Points

Activity

SLIDE 10 – Show your participants the "Doing What's Right" slide and lead a large group brainstorming discussion. Ask "What are some of the reasons that make investigating incidents the 'right' thing to do?" Write down their responses on a flipchart.

PARTICIPANT MANUAL – Your participants can capture their thoughts in their manual.

- Many of the key ideas below will emerge from the brainstorming. When your participants have finished generating ideas, you can review with them any of the points below that were either missed or that you think need a bit more discussion.

Key Points

1) Incident prevention

- As discussed earlier, the knowledge gained from an investigation can help prevent similar

incidents and injuries.

- The knowledge can help prevent injuries not only in your company but also in other companies in your industry, and potentially in other industries.

2) Family

- The desire to keep friends, family and members of your community healthy and safe. Everyone goes home safely at the end of the shift.

3) Integrity

- The impact on you and your company if a serious accident happens as a result of an issue that should have been investigated earlier...guilt, regret, etc.
- Owners of companies that have had a serious incident take place often have a difficult time continuing with the business, knowing that there may be potential for a similar incident to happen in the future.

4) Safety Attitude

- Everything that you do contributes to the culture in your company, based on the values, beliefs, underlying assumptions, attitudes and behaviours that are shared by employees.
- If you follow up an incident with an investigation and implement effective corrective actions, the message to your employees is that their personal safety really does matter to you and your company – workers "have each other's backs".

5) Mental Wellness

- When you focus on improving the safety of the company, the workers feel more safe and at ease when performing their jobs. This removes stress and improves mental health for everyone.

6) Closure & Transparency

- When employees or the community don't know why something happened, it creates an underlying feeling that a workplace isn't safe. Investigations bring closure to an incident.
- Being transparent about investigation results is essential to helping everyone feel more comfortable that an incident like that won't be as likely to happen again.

Below are some points that you can use to generate discussion:

- Incidents affect many people, not only the injured worker.
- It is a priority to keep focused on work and not think of other things that will cause distraction.
- There are huge personal costs associated with serious injuries and fatalities - good investigations can help prevent these types of tragedies.

SLIDE 11 – Show video - Safety is Personal-An Employers Story.mp4 which stresses that safety isn't just a set of procedures in a binder, but a set of protections that affect real people.

Safety is Personal; An Employers Story
https://youtu.be/x9WthTBEKsw (7:12 min)

Summary

- Business owner talks about how he spent a great deal of time creating the safety program, but not enough time conveying it to the employees.
- When an employee gets seriously injured, an investigation happens right away.
- The company realized they had made mistakes in executing the safety plan.
- It was difficult keeping the company going during this time.
- Community members expressed being upset about how the company disregarded their employee's safety.
- They realized the safety manual meant nothing if it didn't translate into showing people how to be safe.
- Now the injured employee has come back to work for the company.
- Now he realizes they must talk to people directly about safety.

PARTICIPANT MANUAL – Give your participants a minute to answer the two questions in their manual ("What were the costs associated with this incident? Who was affected? Why isn't it enough to just have a safety manual?")

Unit 6: Doing What's Good for Business

Background

In this unit, you will lead a discussion with your participants about the financial reasons for conducting incident investigations.

Instructional Points

Activity

- Have an open brainstorming discussion to identify the financial reasons for investigating incidents. Investigations allow a company to meet its due diligence obligations and reduce potential liability.

SLIDE 12 – Show them the slide with the question. Have the group brainstorm what they think the financial costs of incidents might be. Capture their thoughts on a flipchart or whiteboard.

PARTICIPANT MANUAL – They can also write their thoughts in their participant manual in the "Doing What's Good for Business" section.

- Allow about 10 minutes for this activity. Encourage the group to include as many ideas as possible.
- When your participants have finished generating ideas, you can review with them any of the points below that were either missed or that you think need a bit more discussion.
- Once your participants have completed their brainstorming, you can put up the slide with the visual of the iceberg.

Key Points

- WC Act - Section 95. There is no penalty if you can prove you exercised "due diligence."

SLIDE 13 – show the iceberg slide and use it as a guide as you review the different costs.

The headings on the slide are one way to group the costs.

You can note to your participants that there is overlap between the various groupings, and the grouping does not matter as long as the cost is identified.

- Explain the iceberg concept: the direct costs that result directly from the incident (above the water) are usually considerably LESS than the other costs that indirectly result from the incident (under the water).
- Examples of indirect costs: replacement workers, loss of productivity, loss of crew morale, loss of reputation, legal issues.
- You can make the point that the direct costs are sometimes assumed to be the only costs, and are also assumed to be the biggest costs. However, the indirect costs can add up to more (up to 50x more) than the direct costs.
- Lead a discussion of the types of costs associated with each grouping and reinforce the points raised in the large group brainstorm.

Direct Costs

a) Incident Costs – the immediate costs during the incident itself. For example:

- First Aid – the cost of supplies
- Transportation from the site – ambulance, helicopter

- Doctor's visit – regular doctor visits are covered under the Medical Services Plan (MSP); however, if the doctor visit is work-related it will not be billed to MSP. It will be billed to WorkSafeBC.
- Visits to specialists such as chiropractors are not covered by MSP, but may be covered by WorkSafeBC if required.
- Although these costs are insured by WorkSafeBC, they will eventually be regained through higher premiums to the employer, either through loss of discounts or through premium surcharges.
- Down time and the wage cost of the injured worker.
- Also point out that many incidents may not involve injury to workers. There can be other damages that may or may not have had the potential for injury, but are still losses.
- The wage cost of the first aid attendant and the employer during the incident
- Down time for everyone else during the incident
- Wage costs of workers who need to do any remedial safety activities (such as securing the area, controlling hazards, etc.).
- Time spent in follow-up meetings with all the workers to discuss the incident.

b) Investigation Costs – the costs associated with investigating the incident. For example:

- Wage cost of employer and others involved in investigating the incident, those being interviewed, those filling in reports, etc.
- Wage costs for the employer or the investigator cooperating with other agencies like WorkSafeBC (for example, those involved in gathering information such as procedures or past inspections)
- Costs of outside expertise such as fire investigators, metal analysis etc. …

c) Property or Equipment Damage – costs associated with fixing the damage that occurred as a result of the incident. For example:

- Cost of repairing or replacing equipment, trucks, etc. damaged or destroyed in the incident
- Cost of fixing the damage to the site, structures or buildings
- Possible costs for clean-up of the site, such as towing vehicles or equipment, or spill clean-up

Indirect Costs

a) Worker Replacement Costs

- Cost of time spent locating and getting a replacement worker on site
- Costs of replacing the injured worker with a new, likely less skilled and less trained worker
- Cost of training a new worker
- Cost of the new worker's lower productivity
- If unable to find a suitable replacement worker, the cost of not having that work done or having another employee cover that job until another worker is found

b) Lost Productivity

- The ongoing cost of having a worker injured and off work
- The worker being slower/less productive once he is able to return to work
- The impact on other workers after the incident (concerned about safety/shaken up), including the ongoing psychological impact on a worker if a co-worker is injured
- The cost if a worker has a close call and is not injured but is worried about getting injured
- Time invested in training of the injured worker and their development of on-the-job experience is lost
- Cost of counselling for affected workers in a serious incident
- The cost of the site not working if it was a fatality

c) Increased Insurance Costs

- Higher premiums can be directly linked to the incident that injured a worker, and therefore they can be seen as direct costs. They might also be seen as indirect costs because they can arise from injuries suffered as a result of the incident.
- It is important to give your participants a broad overview of the impact to the premiums they pay. However, be careful not to spend too much time on the details in this section, given the time constraints of getting through all the material in the course.
- A key point is that when an incident occurs, it may affect the premiums that your company pays to WorkSafeBC.
- Companies can earn discounts on their base rate of up to 50 percent over time. Key Point: If a company has no claims, their rates improve, up to a 50% discount.
- Companies that experience incidents and have claims costs may face surcharges of up to 100 percent on their base rate. Key Point: If a company has claims, their rates can double.
- Claim costs are compared within the rate group to make sure it is a fair comparison.

- You can refer to WorkSafeBC's Classification and rates FAQ's at this link: https://www.worksafebc.com/en/insurance/know-coverage-costs/industry-premium-rates
- Let your participants know that they can use their investigation and corrective action process to reduce and / or prevent recurrence of similar incidents. This may lead to a reduction in WorkSafeBC premiums (the investigation process itself doesn't guarantee a rate reduction and / or rebate, which only come with a reduction in actual incidents and the related claims costs).

d) Damage to Company Reputation

- A company's safety record helps to retain and recruit good workers.
- If you have an incident, this affects your reputation in the industry and your ability to attract good talent. This can be a long-term impact (it can take a long time to undo the negative impact of an incident. It may never be able to be undone.)
- No one wants an incident, but if you have one, the way you handle the post incident timeframe in terms of how you treat your workers, how quickly you investigate, the corrective actions you take, the follow up you do and changes you make can help your company to recover its reputation.
- A well-executed incident response and investigation goes a long way to maintaining a company's reputation and getting back into operation as soon as possible.

e) Legal Costs

- Ensuring that your company is fulfilling any legal requirements.
- Assurance that your company is in compliance with applicable safety regulations.

f) Summary

- The numerous financial costs of having an incident impact the bottom line of the company. This impacts your company's ability to compete in the sector.
- You can also use the incident investigation process to determine solutions to environment or business-disruption incidents in your company. For example, if operations are not hitting production targets, or if there are environmental issues such as spills or trespasses.

SLIDE 14 – Briefly explain to your participants the relationship shown on the slide.

- Every company falls into a Classification Unit (CU). The rate for a CU is determined based on a combination of the relative risk for injury, the amount of claims, and other factors.
- The more injuries, the higher the rates and the greater the expenses for the company.
- The lower the number of injuries, the lower the rates, which leads to lower expenses for the company.

Reducing injuries > reduces claims costs > which leads to an improved experience rating > which, in turn, reduces WorkSafeBC premiums.

- Share a story to illustrate how one incident could lead to a big cost for everyone. For example, a 55-year-old worker was repairing a tire and didn't take the necessary precautions. The tire exploded, causing the bones in his hands to shatter. As a consequence, he had to go on disability for the rest of his life. This meant he drew a 65% pension for a long time. This incident caused years of suffering for the worker, and a high cost for the company.

SLIDE 15 – Two Examples (uses round numbers for simplification)

Work through two scenarios for the same company to demonstrate the financial implications of having excessive injuries.

In both scenarios, the company has an annual payroll cost of $100,000. The annual premium is the same in both instances - $5,000.

In scenario one, the company has no injuries. As a result, they have a maximum MERIT rating, which discounts their premium by 50%. In this case, half of $5,000 is $2,500. So their final premium paid is $2,500.

In scenario 2, the company has many injuries. As a result, they have the maximum DEMERIT rating. This means they pay a penalty that adds up to 100% of the annual premium. So their final premium is $10,000.

- Merit and demerit premiums are calculated on the average claim costs in the past 3 years compared to the industry average - depending on a company's 3 year average, it can take a long time to recover from demerit premiums.
- Other premiums – Remind your participants that there can also be increases to other types of insurance as a result of incidents: ICBC, Liability Insurance, etc.

Wrap Up of the Reasons for Investigations

Background

SLIDE 16 - Briefly summarize the reasons for doing what's right and doing what's good for business, before moving into the overview of the legislative and regulatory framework.

Instructional Points

- Ask your participants if they have any questions before you move on.

Let them know that the next section of the course will look at the legal (or legislative) and regulatory framework for incident investigations.

SECTION THREE: WHEN TO INVESTIGATE

Unit 7: Legislative and Regulatory Framework

Background

In this unit and the next unit, you will lead a discussion with your participants about the legislation and regulations that govern incident investigations. You want them to have a general understanding of the regulatory framework for investigations and how to fulfill the requirements under the Act and various other regulations and jurisdictions.

Instructional Points

SLIDE 17 - Legal Obligations

Share that the focus of the workshop is to explore WorkSafeBC's legal requirements when conducting incident investigations, though other organization's requirements may be mentioned as well.

- Determining what must or should be investigated.
- Remember that not all incidents need to be investigated
- Investigation principles are fairly standard to all requirements and jurisdictions.
- Incident reporting is different from Incident Investigations.

Incident Reporting:

- Involves communicating the initial incident information to others, including WorkSafeBC when required.
- Focuses on capturing essential information about the incident.
- Includes nature, time, location, and individuals involved.
- Emphasizes immediate actions taken.
- Typically done through formal channels or systems.

Incident Investigation:

- Goes beyond reporting to understand why the incident occurred.
- Involves a systematic examination of the incident.
- Seeks to identify causes and contributing factors.

- Includes gathering additional evidence and conducting interviews.
- Aims to uncover underlying issues and systemic failures.
- Helps prevent future incidents by addressing gaps or weaknesses.

SLIDE 18 - What is Reportable to WorkSafeBC

Make participants aware of OHS Guideline “G–P2–68–1 – WSBC Notification of Serious Injuries – April 6, 2020”

[LINK] https://www.worksafebc.com/en/law-policy/occupational-health-safety/searchable-ohs-regulation/ohs-guidelines/guidelines-for-workers-compensation-act#SectionNumber:G-P2-68-1

Discuss the purpose of the guideline which is to provide more information on what a “serious” injury is.

Review / discuss different types of incidents that are reportable and their applicability to their operations.

Make sure to cover what is reportable to WorkSafeBC immediately:

- If a person is seriously injured or killed.
- If there is a major structural failure or collapse.
- If there is a major release of a hazardous substance.
- If there is a fire or explosion incident that creates a risk to workers.

As well as how regulation requires you to report the following:

- If there is a blasting or explosives related incident.
- If there is a diving incident.

If you are unsure whether to report something or not, its better to go ahead and call WorkSafeBC. Describe the situation and they will make the determination whether to come out to your site or not.

- Make sure to document the date, time, and name of the person spoken to.

SLIDE 19 – To “immediately” report a serious injury, reportable incident or fatality, phone

1-888-621-SAFE (7233). **"Immediately"** is defined as:
Employers are required to report serious injuries and fatalities to WorkSafeBC immediately. This reporting should occur as part of the employers' response at the time of the incident. In responding to the incident, employers should ensure any workplace conditions that present an immediate hazard to other workers are addressed, ensure first aid and medical treatment for the worker, and then notify WorkSafeBC of the incident.

BSFSC has created a handout on serious injuries at the following link:

https://www.bcforestsafe.org/wp-content/uploads/2023/05/Serious-Injury-Fact-Sheet.Final_.pdf

The purpose of the reporting requirement in section 68 is to ensure that a WorkSafeBC prevention officer and/or an investigations officer is able to respond to the incident, as soon as possible, in order to:

- Attend at the scene to conduct an investigation of the incident and ensure the integrity of the scene.
- Offer availability of counseling services, as appropriate.
- Undertake an inspection of the workplace to help ensure that workers are protected before work is resumed.
- Help ensure that any post-incident response or cleanup is performed in a safe manner.
- Provide a referral to compensation services.

The requirement to immediately report a serious injury or fatality is separate from the requirement to report injuries for claims purposes. **Filing a Form 7 will not satisfy the obligation to immediately report a serious injury or fatality**.

Failure to immediately notify WorkSafeBC of a serious injury or fatality will be considered a breach of section 68 of the *Act*, and may result in an administrative penalty.

If you are uncertain about whether you need to report an incident, contact WorkSafeBC at Toll-free: 1-888-621-SAFE (7233).

SECTION FOUR: WHAT TO INVESTIGATE

Unit 8: Incidents that must be Immediately Reported

Background

In this unit, you will review the types of incidents that must be investigated. You will look at the meaning of “serious injury” as well as become familiar with a number of other legislation references that apply to specific situations. Finally, you will use some example scenarios to demonstrate to your participants the thought process necessary to decide what to investigate.

Instructional Points

SLIDE 20 – Review the chart which includes types of incidents that must be immediately reported to WorkSafeBC and the 9 types of incidents that must be investigated by the employer as required by the Workers Compensation Act or by regulation.

- Refer to WorkSafeBC guideline - ***G-D10-172-1 WorkSafeBC notification of serious injuries***. The guideline provides definitions of the nature of “serious injuries” and “immediately”.
- Web source: https://www.worksafebc.com/en/law-policy/occupational-health-safety/searchable-ohs-regulation/ohs-guidelines/guidelines-for-workers-compensation-act#0651CB97465B465ABA6BD61D2773DF6C

Purpose of guideline
The purpose of this guideline is to set out what WorkSafeBC considers to be a "serious injury" which an employer would be required to "immediately" report to WorkSafeBC.

What employers must report
Section 68 provides that employers must immediately report

- Any incident that kills or seriously injures a worker
- And other incidents [as] described in section 68 or required by regulation.

Such incidents must also be investigated by the employer under section 69.

"Serious Injury"
Section 68 provides that employers must notify WorkSafeBC of an accident that resulted in the "serious injury" or death of a worker. The term "serious injury" is not defined in the *Act*.

A serious injury is any injury that can reasonably be expected at the time of the incident to endanger life or cause permanent injury. Serious injuries include both traumatic injuries that are life threatening or that result in a loss of consciousness, and incidents such as chemical exposures, heat stress, and cold stress which are likely to result in a life-threatening condition or cause permanent injury or significant physical impairment.

Traumatic injuries that should be considered "serious injuries" include

- Major fractures or crush injuries, such as
    - A fracture of the skull, spine, or pelvis
    - Multiple, open or compound fractures, or fractures to major bones such as the humerus, fibula or tibia, or radius or ulna
    - Crushing injuries to the trunk, head or neck, or multiple crush injuries
- An amputation, at the time of the accident, of an arm or leg or amputation of a major part of a hand or foot
- Penetrating injuries to eye, head, neck, chest, abdomen, or groin
- An accident that caused significant respiratory compromise, or punctured lung
- Circulatory shock (i.e., internal hemorrhage) or injury to any internal organ
- Lacerations that cause severe hemorrhages
- All burns that meet the rapid transport criteria of the Occupational First Aid Training Manual, including
    - Third degree burns to more than 2% of the body surface
    - Third degree burns to the face, head, or neck
    - Burns of any degree with complications

- An asphyxiation or poisoning resulting in a partial or total loss of physical control (i.e., loss of consciousness of a worker in a confined space) or a respiratory rate of fewer than 10 breaths per minute or severe dyspnea (difficult or laboured breathing)
- Decompression illness, or lung over-pressurization during or after a dive or any incident of near drowning
- Traumatic injury which is likely to result in a loss of
    - Sight
    - Hearing
    - Touch

Injuries that require a critical intervention such as CPR, artificial ventilation or control of hemorrhaging or treatment beyond First Aid, such as the intervention of Emergency Health Services personnel (e.g. transportation to further medical attention), a physician and subsequent surgery, or admittance to an intensive care unit should also be considered "serious injuries."

Instructional Points

SLIDE 21 – Secure Incident Scene

Share that the Workers Compensation Act, section 68 (2) requires that the incident scene for any reportable incident be secured and not disturbed. There are a few exceptions to this that are stated in section 68 (2):

- When directed by WorkSafeBC or a peace officer
- When attending to a person who is injured or killed
- To prevent further injuries
- To protect property that is endangered as a result of the incident

Activity: What Should You Investigate?

Instructional Points

SLIDE 22 - State that there are a number of incidents that must be reported immediately to WorkSafeBC, and 9 different types of incidents that must be investigated as outlined in the Act in Division 10 sections 68 and 69. Run through some example scenarios. For each scenario, ask your participants:

- Should you investigate this, or not?
- How do you decide?
- If the decision is to not investigate, what could/should you do instead?

Scenario 1 - Minor or no injury with potential for serious injury > requires investigation per section (69(1)(c).

- Must be investigated within 48 hours of the incident.
- These are a good opportunity to learn from an event that didn't have any negative consequences like injuries or property damage.
    - Example: falling asleep at wheel when driving but waking up in time to steer back onto the road.
    - Example: a close encounter with a bear where the worker was charged by the bear, but no contact was made.

Scenario 2 - Other close calls or minor incidents > do not require investigation.

- If it is determined that there is little opportunity for learning, these should not be investigated.
- Some close calls or minor first aid incidents may just need to be documented.
- Someone familiar with the operation is best able to judge the value that can be gained from doing an investigation.
    - Possible example could be: minor scrapes and cuts; slipping and falling while doing field work.

Scenario 3 - An incident that resulted in an injury to a worker requiring medical treatment > requires investigation per section 69(1)(b).

- Any injury that requires medical treatment must be investigated within 48 hours.
- Any time that a **Form 7** is required to be completed, an investigation must be done.
- WorkSafeBC requires the Form 7 to be submitted in order for them to track all incidents where there was medical treatment, or the worker cannot perform their regular duties due to the injury.
    - Example: Serious cut injury that requires a trip to the hospital for stitches.
    - Example: A prescription medication is required for the injured worker.
- In addition to the legal requirements, many companies require an investigation if there is equipment or property damage greater than a certain dollar value.
    - Example: Damage to a pickup truck that is more than $1,000 –
        - This could suggest potential for more serious injuries to the driver or passengers.
        - Also, for a company with a 5% profit margin, preventable damages of $1000 represent $20,000 in gross revenue.
        - This could represent a few days of work with no return to the company, but is certainly worth investigating to prevent future recurrence.

- You can point out to your participants that in the case of close calls, choosing whether or not to do an investigation is situation-specific.
- Discuss with your participants other incidents that occur where an investigation or report under the Regulation is not required, but where an investigation may be worthwhile, such as an event or loss like a motor vehicle incident, theft or spill.
- Some questions:
    - Under what circumstances would you want to investigate these?
    - When would you not investigate?
- An important point to emphasize to your participants is that not all incidents need to be investigated to the same level. For example:
    - A minor incident can often be investigated by talking with the worker involved, documenting it either in a daily journal or short one page form and communicating the incident information and corrective actions to the rest of the company. This can usually be done through email or tailgate meetings.
    - However, the more incident-related data you can gather and put in an Excel spreadsheet (or alternative safety data gathering process you use) the better, as it will lead you to be able to do better trend analysis.
    - In the case of a serious incident, or a close call that had potential for a serious injury, a more detailed investigation needs to take place, and a final report must be sent to WorkSafeBC within 30 days of the incident.
    - Fatality investigations are another level entirely. The coroner's office, RCMP, Union (where applicable), management, legal advisor, site safety committee and a Serious Incident Investigator from WorkSafeBC will likely be involved. The online Serious Incident and Fatality Investigation training course is available to help companies with these situations.
- Be sure to mention that the incident investigation techniques can be applied to help solve issues related to the efficient operation of the business.
- Some examples of the types of other events that can be corrected using incident investigation techniques:
    - A machine with higher than normal maintenance costs
    - Missed production targets
- When explaining this chart, be clear with the participants that these are requirements based on regulations.

PARTICIPANT MANUAL – At the end of the discussion, give your participants a few minutes to answer the two summary questions in their manual ("How do I decide whether to investigate an incident? If I decide that an investigation is not required, what are other things I could do?").

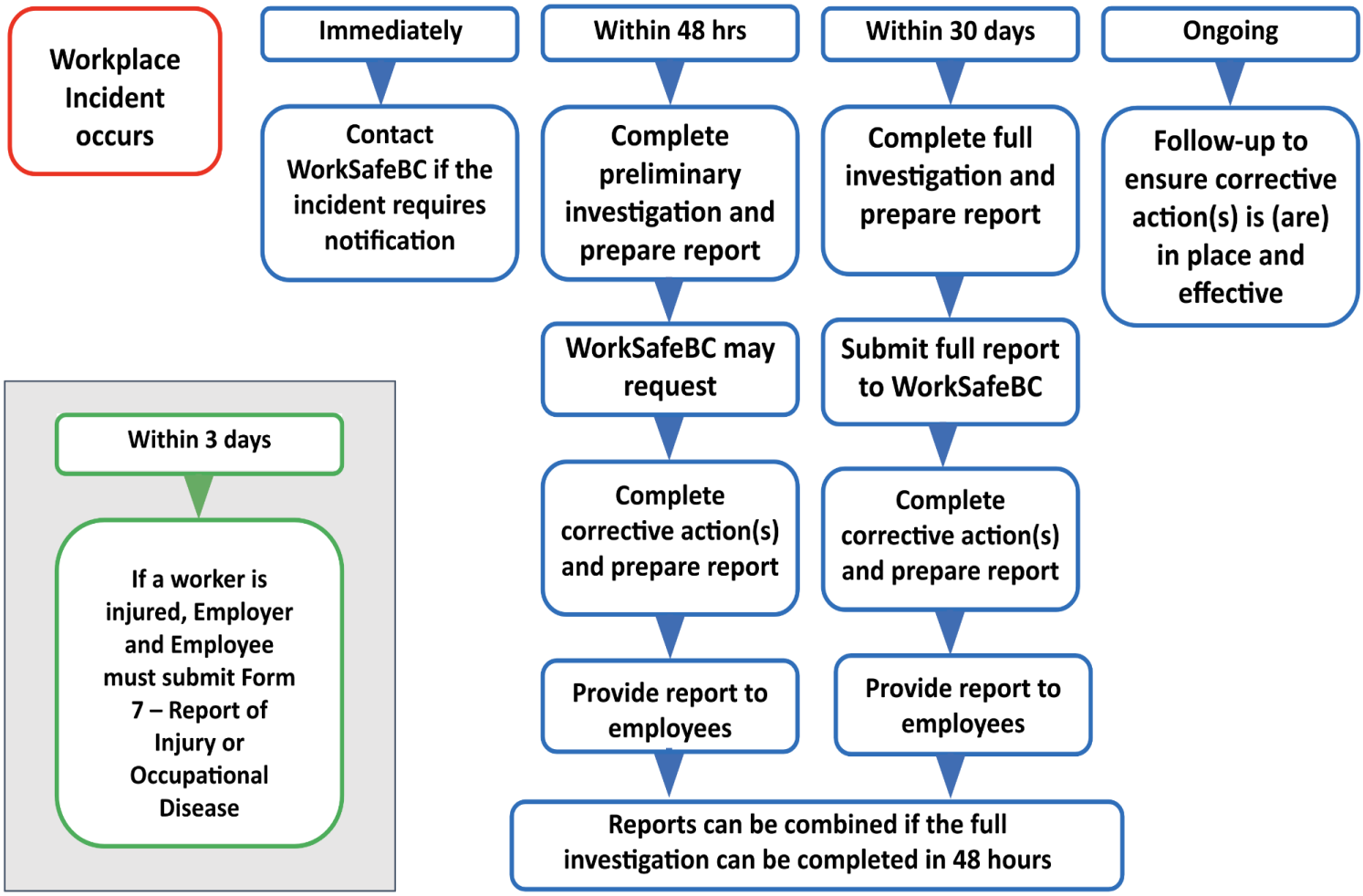
SLIDE 23 – In addition, advise participants that there are a number of other legislation references that apply to specific situations:

- OHSR 4.26 – Workplace Conduct – Improper Activity & Behaviour
- OHSR 4.30(3)(d) – Workplace Violence – Investigations required
- OHSR Section 21.13 – Blasting Incidents – Immediately reportable to Board and Investigation required (referred to in the Regulation as Dangerous Incident Report)
- OHSR Section 24.34 - Diving Incident – Immediately Reportable to Board and Investigation required. (referred to in the Regulation as a Dangerous Occurrence Report)
- And there are other items in the Regulations that would require an investigation, that would eventually need to be submitted to the Board
    - It should be mentioned that reporting or conducting investigations may also be a requirement of other agencies with jurisdiction. For example:
        - Technical Safety BC requires investigations for incidents under its jurisdiction.
        - The Ministry of Environment and Transport Canada, for TDG spill incidents, may require reporting and investigations.

PARTICIPANT MANUAL – A summary list of the legislative references is provided.

SLIDE 24 – Show the slide that summarizes the stages of reporting and investigating an incident – this is a **major learning point in this training** – companies must comply with the new investigation and reporting requirements. Mention that the Workers Compensation Act was revised which outlines new requirements on how an incident investigation is covered:

- Workers Compensation Act – Division 10 – Sections 68 to 73. Note that:
    - preliminary investigations must be completed within 48 hours of an incident,
    - full investigation and corrective action reports must be submitted to WorkSafeBC within 30 days,
    - reports and findings must be provided to the joint health and safety committee, the worker representative, or posted for employees to view.



SLIDE 25 – Show the WorkSafeBC **Video 1-IncInvReporting.mp4** on requirements for Incident Investigation reporting. The video uses a warehouse setting but is very good at explaining the basic WorkSafeBC reporting steps after an incident occurs.

SLIDE 26 – Walk through the 19 sections of the WorkSafeBC Employer Incident Investigation Report (EIIR form 52E40). The form is available from the WorkSafeBC website in a fillable WORD or PDF document format.

Note that there are a number of incident investigation report formats. For the purposes of this training session, reference will be made to the WorkSafeBC Employer Incident Investigation Report (EIIR form 52E40). Mention that more time will be provided in the afternoon to work with the EIIR form in the case study practice exercises.

Form Notes:

Page 1 covers the employers information, the name or names of the injured person, the incident date, time, and place, the type of incident, either major or minor and the report type.

Page 2 includes parts 6–10. This covers the names of the witnesses, the names of other people who might add to the investigation, the sequence of events that preceded the incident, the list of unsafe conditions, acts or procedures and the nature of the injury if it's serious.

Page 3 covers parts 11–14. This includes a brief description of the incident, any corrective actions that have been identified to prevent recurrence of similar incidents, an explanation of any areas left blank and a list of the names of the investigators. Again, completing parts 1–14 is all that's necessary for the Preliminary Investigation Report.

Page 4 covers 3 parts. Part 15 gives a determination of the causes of the incident, part 16 gives a full description of the incident and section 17 is where any additional corrective actions necessary to prevent recurrence of similar incidents are listed.

Page 5 has just two parts. Part 18 is where you list the people who carried out the full investigation, and part 19 is where you list any other relevant workplace parties. Attach a separate sheet if you need more space. Again, for a Full Investigation Report and a Full Corrective Action Report, the whole form, parts 1–19, must be filled in and submitted to WorkSafeBC. Instructions are listed on the bottom of this page for how to submit the form.

SLIDE 27 – The completed Employment Incident Investigation Report can be submitted to WorkSafeBC in several ways:

Online at the www.worksafebc.com EIIR upload portal at

https://online.worksafebc.com/Anonymous/wcb.EIIRUpload.mvc/?_ga=1.181658607.91097333.1434664561 .

By fax 604.276.3247 in the Lower Mainland or toll-free 1.866.240.1434.

By mail to WorkSafeBC, PO Box 5350, Stn Terminal Vancouver, BC V6B 5L5.

SLIDE 28 - Explain the difference between a Human Resources investigation and an Incident Investigation.

An HR investigation primarily focuses on matters related to human resources policies, procedures, and employee behavior within the workplace. It aims to determine if any violation of company policies or employment laws has occurred, such as discrimination, harassment, or misconduct. HR investigations are often initiated in response to employee complaints or concerns and are intended to safeguard the well-being of employees and maintain a healthy work environment. These types of investigation are confidential.

An incident investigation concentrates on identifying the underlying causes, factors, and circumstances surrounding a specific event or incident. It is commonly employed in response to workplace accidents, security breaches, equipment failures, or any other incident that poses a risk to safety, operations, or organizational objectives. The purpose of an incident investigation is to understand what happened, why it happened, and how similar incidents can be prevented in the future. These types investigations are generally not confidential and the results are shared.

Summary of What to Investigate

SLIDE 29 – Refer to handout R-02 Worker's Compensation Act in the Resources section at the back of this manual, and recap and reinforce the steps outlined in the Act and the video in terms of what needs to be done following a workplace incident. Ask if there are any questions or comments from participants about the legal requirements for reporting and investigating incidents.

- Highlight the information in section 70: Investigation Process and section 71: Preliminary Investigation Report, Follow-up.
- Highlight the information in section 72: Full Investigation, Report, Follow-up Process and section 73: Not Attempt to Prevent Reporting.
- Recap the steps in WorkSafeBC's investigation flowchart for what to do following a workplace incident.
- Review which types of incidents don't need to be immediately reported to WorkSafeBC but do need to be investigated:
    - Minor injury or no injury but had potential for causing serious injury.
    - Injury requiring medical treatment beyond first aid.

SECTION FIVE: HOW TO INVESTIGATE

Trainer's Notes

The material in this section is designed to help your participants to learn best practices for preparing for investigations and conducting investigations.

This section of the course is important because:

1. It will lay the groundwork for your participants to learn how to do effective investigations.
2. It will show participants how to write up effective corrective actions that will reduce the occurrence of incidents.

SLIDE 30 – Discuss the process of how to investigate.

- Investigation requires a methodical and orderly approach.
- The basic steps of investigation are common no matter what the type of incident, its severity, the nature of the work, or the location of the worksite.
- The primary goals of investigation are to determine what happened and to see how the same or similar incidents can be prevented.
- It's important to remember the point of the investigation isn't to lay blame on anyone.

Unit 9: Steps of an Investigation

Background

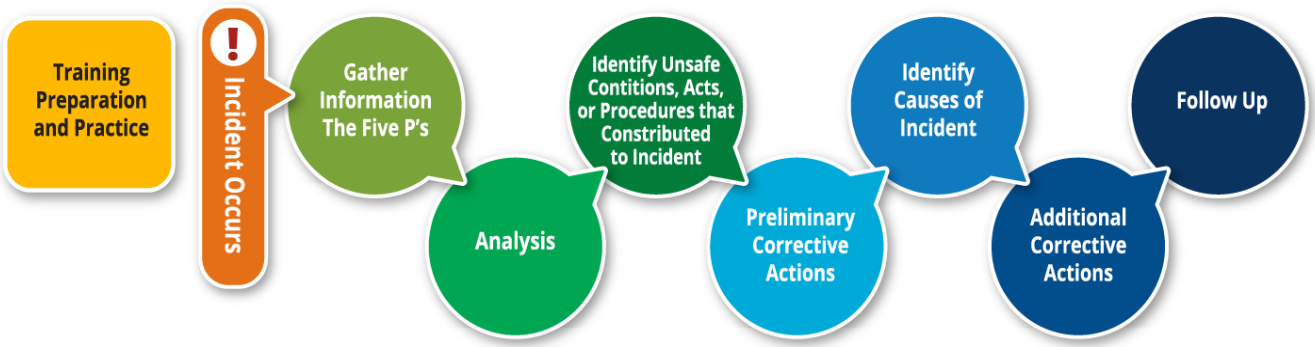
In this unit, you will work through the steps of an investigation, using the incident investigation model.

Instructional Points

The Incident Investigation Model

SLIDE 31 – Now you will introduce the incident investigation model to your participants.

- This graphic was developed by the BCFSC to visually show the various steps of an incident investigation.



- Let them know that you will be covering each of the steps in greater detail.
- This graphic is in their Participant Manual.

Unit 10: Training, Preparation and Practice

Background

In this unit, you will discuss what your participants should do in advance of conducting an investigation, including the equipment they will need for their investigation, and the approach they will need to investigate close calls and minor incidents, etc.

Instructional Points

SLIDE 32 – Show your participants the slide and let them know that the following information will be on the training, preparation and practice that should occur before an incident investigation takes place.

SLIDE 33 – Discuss points outlined below:

Key Points

1) Training

- Briefly discuss the importance of involving both Employer and Worker representatives. Training should be provided for workers, managers, supervisors, and others who may be involved in investigations. The advantage is "that more heads are better than one" when investigating incidents and bring a number of different perspectives to the investigation.
- Mention the Serious Incident and Fatality Investigations course that is available online from the BC Forest Safety Council, which examines the role of various authorities (RCMP-Police, Coroner, WorkSafeBC, and other agencies) in such investigations.

2) Preparation

- Talk to your participants about the importance of being prepared ahead of time for incident investigations, so that if one occurs they are able to act quickly and appropriately and do what needs to be done.
- Let them know that it would be good for them to identify people who could help them with an investigation should one occur. They could collect the names and contact information and keep it in their investigation kit for handy reference. Examples of people might include:
    - Experienced workers
    - Mechanics
    - People who have prior investigation training and high levels of experience.
- Let them know that it would be good for them to let their workers know what to expect if an investigation were to occur. Prepared workers can help with an investigation by supporting a good emergency response, working to preserve evidence, taking good notes, etc. The better prepared the workers are, the better able they will be to support the investigation process.

PARTICIPANT MANUAL – Give your participants a couple of minutes to answer the question in their manual under Training, Preparation and Practice ("What types of training courses or other actions would help myself and others be prepared for an incident investigation, if one is necessary?").

a) Investigation Equipment

- Let your participants know that taking the time to collect the equipment required for an investigation before you need it is important.
- Some key points about investigation equipment:
    - Include everything needed to collect information during an investigation

  - You should keep the equipment with you and accessible (at your worksite, in your truck).

- Key items to include:
  - A set of instructions or a step by step checklist of what to do, to make sure nothing is forgotten or missed during the stressful event
  - Signs or flagging tape to rope off an area
  - A 5 x 7 or an 8 x 10 tarp
  - Large zip lock bags
  - Camera – that takes standard AA batteries, has zoom capability and a high quality lens.
  - Spare batteries (for camera)
  - Measuring tapes – one 10-16’ in length; one 75-100’ in length
  - Paper – blank, lined, graph and waterproof
  - Pens and pencils
  - Gloves – leather and synthetic (not latex)
  - A card with contact information of key people or organizations
  - Flashlight – LED type, with extra batteries
  - Tape – masking tape, scotch tape, duct tape.
  - Utility knife
  - PPE appropriate to the incident scene

PARTICIPANT MANUAL – This equipment list is summarized in their manual. They can also write down in their manual any additional items they would like to include, based on what they heard in the discussion.

b) Investigation Team: Lead Investigator

- Investigations are more effective when they are led by a person who is experienced in incident investigation.
- This is yet another reason for your participants to practice conducting investigations and develop their skills, so they are more effective at doing investigations and at determining causes.

- Other characteristics of successful investigators are:
    - Experienced in investigative techniques
    - Knowledgeable about the people and the industrial relations environment at the company
    - Fully knowledgeable of the work processes and procedures at your company
    - Good communication and interviewing skills
    - Objective and fair.
- It is also a requirement that the investigator be knowledgeable about the type of work involved.
- Reference: WCA sec 70 (1).

c) Other Investigation Team Members

- It is a requirement that an investigation is conducted jointly with a representative from the employer and a worker representative in small companies of 9 to 20 employees (WCA 45, G-D10-174-1), as well as large companies with more than 20 employees (WCA 31, G-D10-174-1), to the extent that the representatives are available.
- Let your participants know that with serious or complex investigations, it may be helpful to put together a team of investigators.
- Emphasize that it may be difficult for small companies to have employer and worker representatives as it's not always practical.
- Discuss with your participants including some of the following people on their team:

The Supervisor

- Discuss that including this individual is a situation-specific choice. Advantages are: this person is most familiar with the people and work processes; the buy-in of the supervisor is needed in order to ensure the corrective actions are implemented, and having them participate in the investigation will help with their buy-in.
- Disadvantages: this person may negatively impact the investigation if they are concerned about covering up their own culpability, or they may lock on to a ‘cause’ too soon in the process.

Other members of the team can include:

- Employees with knowledge of the work but who have no direct involvement in the incident
- Safety coordinator
- Health and safety committee/worker safety representative
- Union representative, if applicable

- Employees with experience in investigations
- "Outside" experts or consultants

PARTICIPANT MANUAL – Give your participants a minute to write down any points they want to remember about their investigation team.

d) Documentation

You want to reinforce with your participants the types of documentation that support incident investigations.

- The main document that will be completed in this training course is the Employer Incident Investigation Report form.
- There are several other pieces of documentation that will help the investigation process:
  - Journal notes from supervisors or workers
  - Witness information
  - Safe Work Procedures
  - Results from previous inspections or worker assessments
  - First aid records

Activity: Employer Incident Investigation Report Form

- refer back to the WorkSafeBC Employer Incident Investigation Report form and discuss the following points.

Key Points

- The form is good to have on hand, but they should not use it to direct the investigation.
- It is more of a tool to summarize and structure the results.
- Using it as a primary tool is too restrictive; it may drive the investigator to poor evidence collection and analysis, which could then lead to premature conclusions.
- For example, it is better to collect witness information in detail on separate pieces of paper than in the form. It can then be summarized and edited for the actual investigation report.
- Once all evidence is collected, the investigator can start to analyze the data and then do an effective job of identifying causes.

e) Emergency Response Planning

SLIDE 34 – Show the slide.

- Give your participants an overview of the importance of emergency response planning, such as first aid preparation and emergency drills.
- Let your participants know that emergency response plans provide information to help them as well as their workers to successfully respond to incidents.
- Share information about the link to resources concerning creating an Emergency Response Plan (ERP) from the Council website: Emergency Response Planning – BC Forest Safety Council
- It is important to be prepared for injuries, and make sure you have immediate and effective first aid, prompt medical evacuation, and good injury management.
- Having adequately trained people with good equipment is critical.
- Talk to your participants briefly about injury management.
- If an incident occurs, the goal is to lessen the impact of the injury.
- The legal requirement for ERPS is located in OHS Reg. 4.13 ERP related Risk Assessments.
- Discuss the requirement for First Aid Procedures.
- Discuss the drills/exercises for all types of emergencies in the ERP (not just first aid).

PARTICIPANT MANUAL – Give your participants a minute to answer the question in their manuals (“Are there any actions I need to take in my business in this area?”)

3) Practice

SLIDE 35 – Spend some time talking with your participants about the importance of practicing incident investigations.

Ask them some questions to generate discussion:

Why does this course contain practice? (practice is necessary to develop investigation skills)

Why is it important to continue to practice, share knowledge, and learn?

How can you practice investigations? Continually learn? (Create scenarios; Investigation of drills - ERP or First Aid drill scenarios FA)

How can you improve incident investigation skills? (Education & training workshops; Reviewing investigation reports from other credible sources to see how they did it)

You want to illustrate to your participants the point that many investigations in the forest sector have been done poorly and do not capture the full learning or understanding of the causes of the incident so that it can be corrected.

Improvements are needed in the understanding and identification of causes. Investigators need to ask more “why” questions. Let them know that you will soon be talking about how to understand and identify causes.

As well, let them know that you will be talking more about developing effective corrective actions, which ideally make lasting changes to prevent the incident from happening again. As examples, “Reviewing procedures with crew” or “Being more careful” are not very effective corrective actions.

Talk to your participants about how important it is to practice conducting investigations, so as to develop their skills.

Brainstorm with them some ways that they could develop their skills, such as:

- Conduct some initial investigations for close calls soon after the course, so as to practice the skills in a lower-risk situation;
- Read and review quality incident investigations conducted by credible agencies (e.g. WorkSafeBC, Transportation Safety Board, etc.). The principles of incident investigation are similar regardless of the industry or the agency doing the investigations;
- Work with others in their area to practice ‘mock’ investigations;
- Practice by doing investigations for incidents that are related to the efficient operation of your company.

SLIDE 36 **–** Show the slide called “Incident Occurs.”

An incident has now occurred. Explain what you should do. Your ERP will provide guidance and will probably include:

- Ensure the safety of the responders.
- Provide first aid and transport if necessary.
- Make notifications as needed - WorkSafeBC, Company, etc.
- Secure the scene.
- Begin the Investigation.

Discuss how people typically want to assist in an emergency without thinking of their own personal safety and how this can lead to more victims.

The first aid response should be within 10 minutes one-way, and 20 minutes total.

The Investigation Team response time will vary, depending on the location of the incident and the investigators.

Unit 11: Gather Information: The Five P’s

Background:

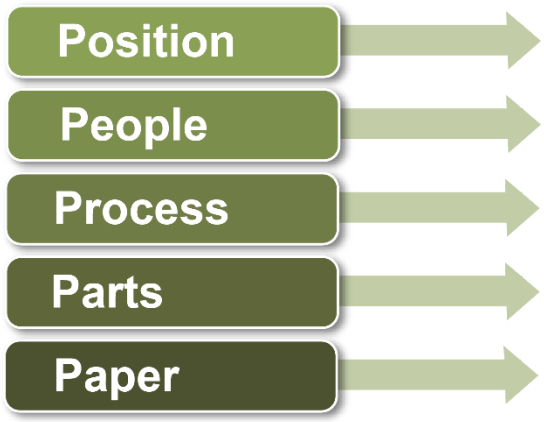
SLIDE 37 – In this unit, you will discuss with your participants the importance of gathering all the relevant information during an incident investigation.

Instructional Points

- The model used is called the 5 P's.
- You can tell them that the particular model that they use doesn't matter, as long as it works for them to remember to take into consideration all of the important aspects to review in an investigation.

SLIDE 38 - Show them the slide of the 5 P's.

- The emphasis of this stage is on data collection - let your participants know that the information that they need to acquire as part of the investigation will come from looking at these 5 P's.
- Information will come from a combination of interviews and reviews of the scene, documents and records, and analysis.
- Talk to your participants about the importance of being curious and keeping questions in mind as they conduct an investigation.
- The goal of the incident investigation is to determine the reasons a particular incident occurred.
- A good way to get some information is to ask questions directly of the people involved.
- However, many questions cannot be answered in this manner if you are to uncover causes. The answers people provide to questions are just one of the pieces of information collected during an investigation.
- Let them know that as they collect information, an important follow-up question to keep in mind and ask themselves will be "If not, why not?"



PARTICIPANT MANUAL – For each of the five P's, there are sample questions that can be used to collect information during an investigation.

SLIDE 39 – Show video 2- ObjectiveAnalysis.mp4 which stresses the importance of maintaining objective analysis and keeping the investigation broad and open – avoid jumping to conclusions too early in the investigation.

Summary

- Let your participants know that they need to understand the whole sequence of events (without any gaps) before they can begin to put together meaningful recommendations.
- They need to be sure they have all the information and that the information they are looking at is valid. They will want to feel as if they can stand behind the data, it is based on fact.
- Quite often this is done with a team…to look for gaps, have discussion, brainstorm, and conduct back and forth questioning.

The First P: Position

SLIDE 40 – This P in the model refers to the position the worker and equipment were in when the incident occurred.

- This includes the physical environment, and any changes that happened in that environment.
- Addressing this P includes the physical data collection that should happen before the scene is disturbed by weather or other events.
- Physical data collection includes sketches of the scene, and taking photos of the scene.
- The investigator should use a blank piece of paper to sketch out a timeline of the incident, answering questions such as: Who was there? What happened and when?
- Investigators should write the description of the incident. They are creating their best understanding of "what happened" based on their overall analysis of all the data they have collected, including, but not limited to, the witness information.
- It is important to distinguish the difference between primary witness information (from workers who were there) and the investigator's description of the incident.
- The "position" at the time of the incident is what is important rather than what may have been considered to be normal conditions.
- In the Participant Manual**,** each 'P' has some extremely helpful questions to ask when conducting an actual investigation. Emphasize to the participants that they should hang onto the manual and use these questions in the future. Some questions that they can keep in mind as they collect information about this aspect are as follows:
    - What were the weather conditions (e.g. - temperature, wind, etc.) at the time of the incident?

- What were the environmental factors (e.g. - noisy, too dark or too bright, etc.) and what impact did they have?
- What toxic or hazardous vapours, gases, dusts, mists, or fumes were present?
- Where was the worker(s) positioned physically before, during and after the incident?
- What escape path did the worker have available to him / her?
- If the incident involved machinery or equipment, what position were the controls of the unit in?
- How did the controls operate - "normally" or did they operate "differently" from other similar equipment / machinery? Were the controls functioning properly?

The Second P: People

SLIDE 41 – Talk to your participants about this P in the model, which refers to all of the people who may be relevant to the incident, for example:

- the injured worker
- other employees with information related to the incident
- any witnesses
- the supervisor
- possibly the manager or the business owner
- first aid attendants
- technical specialists (as applicable)
- other persons with information (i.e. may not be included in the already listed groups of individuals).

- People are an important source of information.
- It will be important for your participants to assess the physical and mental state of the individuals directly involved in the incident, both before the incident and after.
- Some questions that they can keep in mind as they collect information about the people are as follows:
  - What was the worker's experience with the work being done?
  - How were the workers trained?
  - What was the worker's ability to physically do the work?
  - What was the status of the health of the workers (e.g. - were they tired, were they under stress, either from work or personal matters, were they impaired)?
- Explain that you should only interview witnesses that actually saw something.
- Discuss / explain "other persons with information".

- Discuss why there are differences in information received.
- Explain why memories are fallible OR how they change over time once discussions begin.
- Explain that if you use “technical specialists” it may impact your 30-day investigation window.

SLIDE 42 – Let your participants know that you are going to talk briefly about two aspects of gathering information: witness information, and interviewing skills.

1 - Witness Information

- Let your participants know that it is important for them to separate witnesses from one another quickly after an incident. Otherwise, the strongest personalities will influence the stories of the others.
- It is important for them to ask witnesses to document what they saw as soon as possible after the incident, in their own words. They can verbally describe it to someone on the investigation team, or they can write it down, or both.
- Prevent witnesses from having discussions together.
- Note that the first time a story is told is the most critical. People start to downplay the incident almost immediately.
- Witnesses should be given the opportunity to describe what they saw before the investigator asks any questions.
- Hundreds of studies tell us that eyewitness memory is fragile, malleable, and susceptible to forgetting, even in optimal conditions.
- The more the story is told – the more changes likely occur. This may be good or bad, but it’s usually not intentional. They may enhance some information and downplay others. They may form biases / opinions.
- Psychological research explores the factors that may lead to inaccurate witness recall post-event and/or factors that can help maintain the quality and quantity of a witness’s information.
- A few people may lie or try to deceive – but they are generally trying to protect someone (e.g. self or other).

PARTICIPANT MANUAL – Give your participants a minute to write down any key points in their manual.

2 - Interviewing Skills

Part of the information for the investigation will come from interviewing people.

- It will be up to the main investigator (possibly your course participants) to decide who is important to interview as part of the investigation.

- Emphasize to course participants that there are two groups of people who need to be interviewed:
    - Witnesses (i.e. - those people who actually SAW the incident occur); and
    - Other people who may have significant information (e.g. - people who spoke to the injured person before the incident, supervisors, people who responded, etc.)

SLIDE 43 **–** Show **Video03-InterviewSkills.mp4 (9m-35s)** – Dr. Carla MacLean presents 4 common elements found in effective interviews [Powell, Fisher & Wright, 2005]. Ask for comments, reactions, or questions following the video and discuss topics raised.

- Discuss with your participants the different types of interview questions:
    - Open Ended Questions:
        - Used to gather information.
        - Encourages a full, meaningful answer using the subject's knowledge.
        - Tend to be more objective.
        - Allows the interviewer to include follow-up questions and probe for further information.
        - Share some examples of "Open" Questions
            - Can you tell me what safety responsibilities you have?
            - What would happen if a worker refused to comply with PPE requirements on site?
    - Closed Questions:
        - Used to confirm or deny.
        - Subtly prompts the respondent to answer a particular way.
        - Often produce a "yes/no" response or a single fact.
        - Share some examples of closed questions:
            - Have safety responsibilities been communicated with you?
            - Does the Company have a progressive discipline program?
            - Are there written Emergency Response Plans onsite for emergencies?
- Some tips about interview questions:
    - Use broad open-ended questions to start – you can narrow the questions down in your follow up.
    - If the interview subject is reluctant, narrow the questions down.
    - Use caution with "why" questions – this may lead interviewees to interpret rather than report.
    - Listen! Try not to formulate your next question without paying attention to the answer. You may miss a follow-up opportunity.

Recommend to your participants that they develop a set of a minimum of 10 questions that they will ask each interviewee during an incident investigation. They can then compare the answers for consistency.

- Let them know that they should allow the person they are interviewing to tell their story uninterrupted. They should not take detailed notes the first time a person tells their story. The interviewer should just listen and only make note of key points to follow up on later during the interview. Once the person is finished, the interviewer can ask them to repeat the story and then take detailed notes. After they have finished the second time, the interviewer can then ask for clarification on any areas noted.
- As an investigator it is important for your participants to understand that the information gathered during the investigation is usually not shared outside of the company. However, remind them that WorkSafeBC has access to all the information gathered in the investigation. The only exception is if a lawyer is involved in an investigation and the lawyer client privilege provides confidentiality of the information shared between the lawyer and client.

Overall interview tips:

- If you don't ask the right question, you will not get the right answer. In other words, how the question is posed could lead to an inaccurate and / or biased answer. Be careful how you phrase things.
- Don't assume anything. If you do not know something, you must ask to find out the information.
- If you are not aware of issues, you cannot manage or correct them.
- If you want to use a voice recorder, you will need to get permission first.
- It's best to have one on one interviews. If you have to have two interviewers, have only one of the interviewers ask questions.
- It's good to maintain eye contact with the person you are interviewing.
- Pick a quiet spot with few distractions.
- Prepare a list of key points to discuss.

The Third P: Process or Procedures

SLIDE 44 – This P in the model refers to the work processes or procedures that were being followed at the time of the incident.

- As part of the investigation, your participants want to uncover whether the work processes and procedures contributed to the incident, and to what extent.

Upset Conditions

- Upset Conditions refers to something that is occurring that is out of the ordinary with the work process. For example, a piece of equipment is broken down, or the weather conditions are poor.

- Talk to your participants about Upset Conditions, and the importance of including an evaluation of whether upset conditions contributed to the incident.

Safe work Procedures (SWP):

- Do SWP exist? Were they known, understood and followed?
- How current are they? Are they dated? Did the worker have the latest version?
- Did the work conditions affect the SWP use? Compliance?
- Are the SWP thorough enough? Are they effective?

Unsafe Acts or Unsafe Conditions:

- Did they know or recognize that it was unsafe?
- Did they take a chance?
- Was there always a review?
- Were the Manufacturer's instructions followed?
- Unsafe acts or behaviours account for 85% of incidents, while unsafe conditions account for 15%. Many "Unsafe Acts" performed by workers can / do often create "Unsafe Conditions."

Some questions that they can keep in mind as they collect information about the Process aspect are as follows:

  - How experienced was the worker involved - experienced with the process, new to the process, or somewhere in between?
  - What upset condition(s) were there at the time of the incident?
  - What safe work procedures (SWP) had been established?
  - When were the SWP communicated to the workers involved?
  - When was the SWP last reviewed?
  - How was the SWP being followed?
  - What conditions may have changed to make the normal procedure unsafe?
  - What changes may have been made to the process? When was the SWP updated?
  - How adequate and effective was the SWP?
  - What needs to be revised or updated in the SWP?

The Fourth P: Parts

SLIDE 45 – This P in the model refers to the equipment and materials being used by the workers at the time of the incident.

- Some questions that they can keep in mind as they collect information about this aspect are as follows:
    - What equipment, tools and/or materials were available to the workers?
    - Was the equipment, tools and/or materials appropriate for the job?
    - How were the equipment, tools and/or materials being used?
    - Was the correct equipment, tools and/or materials being used in a safe manner (i.e. according to the manufacturer's instructions)?
    - What safety devices were available, how were they being used, and were they working properly?
    - What lockout, if necessary, was being used at the time of the incident?
    - Was there equipment, machinery or tool failure?
    - What caused the equipment, machinery or tool to fail?
    - How was the equipment, machinery or tool designed?
    - How were recommended maintenance procedures followed?
    - What other similar previous failures may have been experienced with the equipment, machinery, or tool?
    - Had the broken or failed part been replaced previously? Was it an OEM part or cheaper replacement, even fabricated or jerry-rigged?
    - What hazardous substances were involved?
    - How were any hazardous substances identified?
    - What other less hazardous or alternative substances were possible or available?
    - What personal protective equipment (PPE) was used?
    - How appropriate was the PPE used for the work?
    - What was the workers training in the use of their PPE?
    - What condition was the PPE in?
    - Were any chemicals involved? Were they stored properly? Were the handling methods proper? Were the Safety Data Sheets (SDS) requirements followed?
- Remind your participants again that each time the answer reveals an unsafe condition or unsafe act, it will be important for them to determine why this situation was allowed to exist.

- As well, mention that a large percentage of unsafe conditions are created by people performing unsafe acts and creating “traps” in the form of unsafe conditions.

The Fifth P: Paper

SLIDE 46 - This P in the model refers to the documents and records that make up part of the safety program for the workplace.

- These documents may provide insights into some of the contributing factors of an incident.
- Discuss briefly other information sources for investigations, such as:
  - Inspection reports
  - Previous investigation reports
  - Worker assessments
  - Safety Data Sheets (SDSs)
  - Industry standards
  - Legislation and regulation
  - Operating manuals
  - Maintenance records
  - First Aid Records
  - Safe Work Procedures (SWP)
  - Journal notes
- Some questions that they can keep in mind as they collect information about this aspect are as follows:
  - What workplace safety rules were communicated to all workers? Were they understood?
  - What written safe work procedures were available?
  - What orientation was provided for the involved worker(s)? Was this documented?
  - What hazards had been previously identified and documented?
  - Once the hazards had been identified, what Risk Assessment was conducted?
  - Who completed the Risk Assessment - a qualified individual?
  - Were the results of the Risk Assessment accurate / reasonable / realistic?
  - What procedures had been developed to overcome any hazards? Was this documented?
  - When were those procedures implemented - prior to the incident?

Unit 12: Analysis

Background

SLIDE 47 – In this unit, you will talk about the next step once all of the information is collected: analysis of the information.

Instructional Points

- Once all the information has been collected using a process such as the Five P's, the information needs to be analyzed.
- An investigator does not want to begin the analysis until all information is collected.

SLIDE 48 **–** Discuss the importance of clearly establishing the sequence of events and using critical thinking when analyzing an incident.

Sequence of Events

- Talk to your participants about the importance of laying out the sequence of events for the incident.
- The purpose is to identify any gaps in the information and follow up to get the missing details.
- Demonstrate an activity where the key events in the incident are written out on sticky notes and stuck to a surface – a good approach to determining if anything has been missed.

Critical Thinking

- Mention that there is a sixth P that is not often considered in incident analysis – 'politics and agendas'. In some organizations there may be pressure to "not rock the boat", which may result in under-reporting or non-reporting of incidents. Through this course and back at work, all employees (workers, managers, and supervisors) must be encouraged and supported to report and take an active role in incident investigations to reduce and eliminate injuries, property damage and other losses, and 'close calls'.
- Discuss the importance of critical thinking in their analysis of the sources of information.
- Let them know that they want to be asking questions that dig into: Is the information based on fact? What are the biases that may be present in the information from witnesses or in you, the investigator?
- Preconceived idea bias? For example: I have seen a hundred similar incidents and causes are always the same.
- Hindsight bias? For example: How could the worker not see this coming? The causes of the incident are simple and easily identified.
- The following are examples of evaluation questions that investigators can ask to test if the information is fair and valid:
    - Does this source have a good reputation?

- Is the source informed?
- Am I getting an expert opinion?
- Does the source know enough about the incident to make an informed judgement?
- Can I trust this source (person or thing)?
- Is the source trying to convince me of something or influence my behaviour?
- Would the source be negatively affected if the truth was known?

SLIDE 49 – Review an example that demonstrates how easy it is to give in to biases.

There is an incident where the driver loses control of their vehicle and it goes off the road.

Upon investigation, you learn that the person has a history of speeding tickets. So your immediate assumption is that the driver was speeding and this caused the incident.

But upon deeper investigation, you learn there was a mechanical problem with the vehicle, and this was the more likely cause of the accident.

If you had settled for a quick and easy investigation, and had followed your biases, you would have come to the wrong conclusions. Therefore, keeping an open mind and thinking outside the box are essential to finding the truth.

SLIDE 50 – Continue discussing the analysis process.

Once all the information is gathered, discuss the process they should take:

- **Analyze the known facts.** This is information that the investigator can be certain is accurate and is not based on witness statements or other's observations. Examples include - data from weather stations or on-board vehicle recording devices.
- **Review the evidence.** Evidence is information gathered about the incident that may not be as certain as facts. There is more confidence in evidence that is collected directly by the investigator. There is less confidence in evidence that is based on someone else's observations.
- **Consider / evaluate any other data related to the incident.** This might include statements, opinions, or other information.
- **Evaluate and "weigh" the data.** Consider that each data piece is not the same weight. Some data may be more important than others.
- **Consider that some pieces may be missing or not "fit."** Investigators should try to find any missing information if possible.
- **Use critical thinking and stay objective.** This includes being open to many possible causes of an incident and not jumping to conclusions.

At the end of the process, you'll need to derive your "conclusions" based on the data you have. What did happen?

PARTICIPANT MANUAL – Give your participants a minute to answer the two questions in their manual ("Why is it important to be certain of the exact sequence of events? Why is critical thinking important?")

Unit 13: Unsafe Conditions, Acts, or Procedures

Background

SLIDE 51 – In this unit, you will help your participants to understand the meaning of unsafe conditions, acts, and procedures. You will discuss the type of thinking and questions that will help them to determine causes, as well as the other factors to consider when investigating incidents.

Instructional Points

SLIDE 52 – The next investigation step is to identify unsafe conditions, acts, or procedures that significantly contributed to the incident. Describe anything or the absence of anything that contributed to the incident. To do this, ask yourself why this incident happened? What was the sequence of events? Why did each event happen? Avoid stopping at personal factors such as "the worker was careless." Instead, focus on fixing the conditions, acts, or procedures that can be addressed quickly and with more immediate effect. Examples can include poor visibility, inappropriate tool for the work, using equipment without guards and lack of safe work procedures.

SLIDE 53 – Example

Imagine a situation where icy conditions make walking in the parking lot dangerous. As a result, a worker falls down while crossing between buildings. Is it the worker's fault for walking in an unsafe area? Perhaps, but other factors may play a part. Perhaps the parking lot was not salted and sanded properly, or the type of salt was ineffective. Maybe some debris was littering the parking lot and making it difficult to walk. Maybe there was a clogged gutter that was causing an unusual amount of water to spill on the parking lot.

These are the kinds of unsafe conditions, acts or procedures that could contribute to the incident.

Unit 14: Preliminary Corrective Actions

Background

SLIDE 54 – In this section, your participants will learn about the importance of putting effective preliminary corrective actions in place.

Instructional Points

- Let your participants know that the regulations use the terminology "Preliminary Corrective Actions", which are essentially recommendations.

- You want to emphasize to your participants the importance of putting effective preliminary corrective actions in place as part of an investigation. Reference WCA s. 71(3): *"Following the preliminary investigation, the employer must, without undue delay, undertake any corrective action determined to be necessary under subsection 71(1)(b)."*

SLIDE 55 – Review these points:

- Emphasize that they will be tempted, as they begin the investigation process, to develop the preliminary corrective actions immediately.
- Your participants should understand by this point that identifying the unsafe conditions, acts, and procedures will be essential to developing effective preliminary corrective actions.
- Let your participants know that if they have done a good job of finding the unsafe conditions, acts, and procedures, they should be able to write good recommendations.
- The recommendation needs to be linked directly to the unsafe conditions, acts, and procedures.

SLIDE 56 **–** Talk to your participants about the importance of developing corrective actions that are **SMART**.

SMART Recommendations

- As part of the investigation report, your participants will be developing corrective actions following the preliminary investigation and the full investigation.
- **SMART** means:
    - **S**pecific – Giving an idea of actions to be taken to achieve the intended outcome(s);
    - **M**easurable – Able to be followed up on to confirm that the actions have been done;
    - **A**chievable – Recommended actions must be able to be carried out;
    - **R**ealistic – Actions must be cost effective, as well as practical (taking into account legal and other constraints);
    - **T**imely – Recommendations should be completed as soon as possible to prevent recurrence – but they should have a reasonable timeframe.

Activity

PARTICIPANT MANUAL – Give your participants a couple of minutes to write down the key characteristics of effective corrective actions (i.e. SMART).

SLIDE 57 – Review the example that is specific. Also review an example that is not specific.

- Explain the difference.

SLIDE 58 – Review the example that is measurable. Also review an example that is not measurable.

- Explain the difference.

SLIDE 59 – Review the example that is achievable. Also review an example that is not achievable.

- Explain the difference.

SLIDE 60 – Review the example that is realistic. Also review an example that is not realistic.

- Explain the difference.

SLIDE 61 – Review the example that is timely. Also review an example that is not timely.

- Explain the difference.

SLIDE 62 – Now that participants know more about effective corrective actions, let them know that they are no longer allowed to use the following recommendations as they are essentially meaningless.

- Work Safely
- Don't take chances
- Watch out!
- Be more careful.
- Drive defensively.
- Pay more attention.
- Avoid hazards.

None of these meet the SMART criteria.

SLIDE 63 – Review some key components regarding corrective action recommendations:

Recommendations should be:

- Developed in the preliminary investigation.
- Reviewed/revised/updated as necessary after all information has been collected and all causes identified in the full final report.
- Linked directly to the unsafe conditions, acts and procedures that contributed to the incident.

Unit 15: Identifying Causes of Incidents

Background

SLIDE 64 – In this section, your participants will learn about the importance of identifying causes of an incident.

Instructional Points

SLIDE 65 – Explain how we've looked at preliminary causes and corrective actions. These deal with the most immediate changes that are needed to prevent the incident from happening again in the short term. The next investigation step is to think beyond that timeframe. What are the deeper, underlying causes of the incident? These are generally causes that will require corrections that take a longer time to implement.

For an idea of the types of causes, you can refer to the handout called, “Cause Definitions.” This handout gives the cause, definition and an example of that cause. (It is located in the Resources section of the course manual.)

Cause definitions handout:

Cause		Definition	Example
1.	Grip or Hold	Failure to secure an object, manually or with the use of a mechanical device(s), such that the object is inadvertently released.	Drums on a pallet are lifted and fall off because they were not restrained/ secured prior to lift.

For example, if there is a drum on a pallet that’s being lifted and the drum falls off, the cause, according to the list, is “Grip or Hold.” This is defined as when there’s “failure to secure an object, manually or with the use of a mechanical device, such that the object is inadvertently released.”

Activity

PARTICIPANT MANUAL – Give them two incident examples from the “Cause Definition” sheet and have them identify the cause. They can fill out their answers in the space provided.

SLIDE 66 – Review this information about the 5W’s + 1H:

The 5W’s + 1H Questions

Discuss how asking questions is a key part of an incident investigation. Some questions are easier to answer than others but usually answering the harder questions reveal the most useful information.

- Who/what/where - are usually easy to identify.
- When - may or may not be easy, depending on the last check in and whether the incident was observed or not.
- Why & How - These questions get to the guts of the investigation. They also take the most time to determine (depending on the investigator’s skills).

PARTICIPANT MANUAL – These are also summarized in their manual.

SLIDE 67 – Review the “Five Why’s” approach:

The Five Why’s

- You can let your participants know another approach to digging into causes is the ‘Five Why’s’, which involves asking “Why?” several times (usually 4 or 5 times) each time an answer or reason comes up for what happened.
- The Five Why’s essentially is a system of continuing to ask objective, open-ended questions until the answer is simple and clear.
- Talk to your participants about how this approach helps to dig through the layers of an incident and arrive at the cause.

Activity

- Let them know that many times there is more than one cause.
- Provide an example for your participants:

SLIDE 68 – A driver loses control of a vehicle and it rolls on its side.

Context: Crew was travelling on a logging road from one site to another.

- They were driving too fast for conditions.
- Why were they driving fast? Because they were late…
- Why? Because they had to change two flat tires…
- Why? Because the tires burst on the road…
- Why? Because the tires were bought as used tires…
- Why? Because the tires were cheaper but not the type needed for the gravel roads.

Unsafe condition, act, or procedure – They were driving too fast for the conditions.

Underlying cause - They didn't have the right tires for the road.

Human Factors

SLIDE 69 – Review how human factors can play into causes.

First, discuss how the term "human factors" can be misleading.

While "human factors" does include people's characteristics and behaviours, it also includes broader areas of human interaction such as facilities and management systems that should be considered when investigating incidents.

Some key points are:

- Workers do not intend to create accidents or incidents.
- They do things that seem reasonable to them.
- They do not think they will get hurt.

- A question to ask: How is it that the action seemed reasonable, rational and safe to that worker at the time of an incident?
- Common sense is thought of as 'knowledge and experience that most people allegedly have, or that the person using the term believes that they do or should have'.
- We make judgments about what we think people 'should' have in the way of common sense, which often is not accurate.
  - Use the following examples with your participants. These points highlight that what we might think of as common sense, might not be depending on the situation (e.g., where we are in the province):

- EXAMPLE: Snowfall on logging haul roads. On the Coast, this means no log hauling. In the Interior, it is necessary to haul logs in freezing conditions in order to access winter blocks.
- EXAMPLE: Certified Tree Fallers. They are certified but need to be qualified on the timber type and steepness of terrain where they are working. Don't assume that once a faller is certified they can safely work in all areas of the province.
- EXAMPLE: Equipment controls. New controls are being developed all the time – for example, in graders. So an experienced operator who is seen as having a lot of common sense may be completely unfamiliar with the controls on a new machine. Also, there have been examples where equipment operators modified their controls due to ergonomic problems Someone new to the operation may not know this and have problems controlling the machine when their shift comes.

Other Factors in Incidents

SLIDE 70 – Show the picture of a worker.

- Have the group brainstorm possible personal, family and other matters that might be affecting that worker. For example: financial problems, a fight with a partner, forgetting lunch, a poor night's sleep, a child being bullied at school, an ill parent, etc.
- Lead a discussion about how those things might affect the worker's ability to do their job, have proper judgement, etc. Stress that it is critically important that all workers put their troubles and worries aside' while on the job.

Unit 16: Additional Corrective Actions

Background

SLIDE 71 – In this section, your participants will learn about the importance of putting additional corrective actions in place.

Instructional Points

SLIDE 72 – After an additional round of underlying causes have been determined, corrective actions to address these need to be established. Corrective actions aim to correct a condition or problem within the company to prevent similar incidents from happening in the future. For them to be effective, it's necessary that the deeper, underlying causes be accurately identified.

SLIDE 73 – Explain the purpose of Corrective Action Logs (CAL):

- CAL are created to keep track of the planned corrective actions and follow up.

- They may be created as the result of the incident, but also could be due to a hazard or change in condition that's been identified or reported.
- They should also be discussed at safety meetings.

SLIDE 74 – Use the "Poor" (Handout - Example A) and "Good (Handout - Example B)" examples (found in the Resources section) of the completed Incident Investigation form, review the corrective actions written on each form.

- Discuss with your participants how to properly complete the investigation form and how to make the corrective actions more effective.

Comparison Notes:

	What the "Bad" version is lacking…
Section 1	• Incomplete address • Employer representative missing last name
Section 2	-
Section 3	Doesn't say the time of day (am or pm)
Section 4	Doesn't identify the type of occurrence (injury)
Section 5	Report type is incomplete (missing a name) and the dates for the Full Investigation Report and Full Corrective Action Report are the same as the preliminary investigation, which indicates that the investigation was rushed.
Section 6	Missing witness name (Aaron Green, Supervisor)
Section 7	-
Section 8	Some details missing from the sequence of events
Section 9	Too vague. Which equipment? Why was it wrong? What was needed? Focus is on blaming the worker.
Section 10	Doesn't identify the nature of the injury
Section 11	Description is less specific and missing key details. For example - Who witnessed the incident? How was Kevin injured? What did Kendra do? How was Kevin transported to the hospital?
Section 12	Corrective actions are focused on the worker and not on other factors. What specific actions would prevent this from happening again? Also, the date of completion is too lengthy to help prevent this from happening again.
Section 13	This section should have been completed for the blank witness section.

Section 14	Missing names of the worker representative and injured person.
Section 15	Unclear. Focus is on blaming the worker and not on identifying underlying causes. What does lack of care mean? What additional training is needed? What equipment is needed? What role did the setting play in the incident? Would the presence of another worker have helped?
Section 16	Missing detail. Info here is just a repeat of the original description with no additional details. What age was Kevin? What role did Aaron and Kendra play? What happened before the incident? Why did Kevin lose his balance?
Section 17	Incomplete. Will disciplining the worker solve the problem? How do the SWPs need to change? Could a safety checklist help? How could the ground be made more level and therefore safer?
Section 18	Missing names of the worker representative and injured person.
Section 19	-

Activity

- When discussing the causes section of the form, emphasize the importance of taking the time to accurately determine what the deeper causes are.
- Let your participants know you are going to cover this skill in greater detail shortly.

SLIDE 75 – Review how to submit the form.

Emphasize the importance of:

- Following the guidelines to submit the form.
- People who investigated the incident are identified on the report. Signatures are optional.
- Explaining the use of all blank spaces.

Unit 17: Follow-Up

Background

In this section, you will let participants know about the importance of following up on the recommendations to make sure they have been completed and that they have had the desired improvements.

SLIDE 76 – Explain the purpose of follow up.

Instructional Points

SLIDE 77 – What are the key actions after an investigation? According to WCA s71 & 72, corrective actions must be put in place. Effective corrective actions have a person identified who is responsible for completing the action. There is also a deadline assigned to each corrective action.

- Follow-up assures that corrective actions are implemented in a timely manner and are assessed in terms of their effectiveness – did / are the corrective actions making a difference? What are the consequences and impacts of corrective actions taken?

- A good follow-up also requires that someone checks to see if the corrective actions are having the desired positive effect. If not, new corrective actions must be created and implemented.
- As well, follow-up helps to determine if there are any unintended consequences as a result of corrective actions taken.

SLIDE 78 – Communication is an important part of follow-up. Communicate to the people responsible for carrying out the corrective actions. Also, communicate to the crew / employees about the incident, how it was investigated and the steps that are being taken to prevent it from reoccurring.

- Communication should be broad as possible and involve employees, management, clients, equipment manufacturers, other divisions and operations, and others affected.
- Broad communications helps to close the loop between the incident and what outcomes have resulted from the corrective actions taken as a result of the investigation.
- You can also mention that sharing investigation results with the industry will help other operations prevent similar injuries. A good way to do this is to submit their incident reports to the BC Forest Safety Council and they will publish them on their Safety Alert website at Submit a Safety Alert – BC Forest Safety Council - https://www.bcforestsafe.org/safety-alerts/submit-a-safety-alert/

Unit 18: Wrap-up of How to Investigate

Background

In this section, you will wrap up the How to Investigate section.

Instructional Points

SLIDE 79 – Show your participants the Incident Investigation Model graphic once again, to reinforce the different stages that you have covered and as a summary of the entire process.

Remind them:

- Investigation is a process.
- The steps are there to create a system that helps you be thorough.
- What each step is and a brief reminder of what happens in each step.
- These steps are designed to match with what needs to be put into the WorkSafeBC form 52E40.

SECTION SIX: INCIDENT INVESTIGATION PRACTICE

Review these notes:

Trainer's Notes regarding Practice Demonstration and Team Case Studies

In this section, you will conduct at least one practice investigation of a fictitious incident with your participants. If you have time, you can do a second exercise.:

1. a Large Group Demonstration / Practise Case Study (Unit 19 – approx. 40 minutes) to determine causes, and to develop corrective actions for a full investigation.

   and

2. a Small Group / Team Practise Case Study (Unit 20 – approx. 70 minutes) to determine causes, and to develop corrective actions for a full investigation.

This section is designed to give your participants hands-on practice with conducting an investigation so that they will be better equipped to take on their own investigations if needed. This section is key to ensuring that your participants can apply the theory taught earlier in the course to real life examples. For this reason, ensuring enough time to practice an investigation is desirable. This section of the course is important because:

1. It provides your participants with hands on practice needed to help solidify their understanding of how to conduct an investigation
2. Practicing investigations is a key aspect of being able to do an effective investigation later.
3. Allows the trainer to provide feedback on completed investigations and coach participants on the use of the form, and getting to cause(s) as the basis for corrective actions.

Resources to assist with all investigation demonstration / practice case studies:

- Resource kits are provided to support a realistic scenario for each of the three practice case study investigations. Feel free to augment the kits with your own materials to enhance the effectiveness.
- Use the following tools to support your participants in conducting the practise case study investigations:

1. The first case study (Pickup Incident) has a short video, but you'll also have to – read the incident description provided. Participants can then ask for additional information.
2. Videos for the other 2 case studies serve as the "interview" stage of the first step of the Incident Investigation Model – Gather Information using the 5 P's. **Some information relating to the incident has been excluded from the video and is available to participants if they ask for additional information** during their investigation.

3. **5P worksheet** handout to help with gathering information about causes that will help inform corrective actions for the case study investigations.
4. Sticky notes to write out the sequence of events, one event per sticky note. Ask participants to state each step in the sequence - write each step on a sticky note and post the sticky notes on the wall, or on their table, in the proper sequence. This will help them to identify if they have missed any events.
5. Copies of blank Employer Incident Investigation Report forms.

- Each scenario package (found in the Resources Section at the back of this Trainer's Manual) includes:
    1. Incident description;
    2. Additional incident information relating to the 5 P's not shown in the video; and
    3. Possible Corrective Actions.

Note: The scenario packages are provided as handouts for the Team Practise Case Study – each scenario has 10 to 11 pages of additional information relating to the 5P's that teams can request. When requesting additional information, a team will need to be specific about what information they want relating to Position, People, Process, Parts, and Paper. Provide requested information as available in the scenario package.

- Three case studies are available - videos are provided to support all of the case studies. Use the 2 video case studies or case study #3, depending on the background of your participants – one case study for the Large Group Demonstration / Practise Case Study, and the other case study for the Small Group / Team Practise Case Study.
    - Case Study: Pick-up Crash – read Investigation: Pickup Incident description which the driver provided as an initial statement of the incident and show video. (length 00:53)
    - Case Study: Wind Event Incident – read Investigation: Wind Event Incident. A short case study which focuses on a fictional, non-fatal incident. (length 5:19)
    - Case Study: ATV Unloading – read Investigation: ATV Unloading Incident. A short case study which focuses on a fictional, non-fatal incident. (length 4:50)
- There are two additional case studies if needed:

Case Study #1 - show Video05-LogTruckLoading.mp4 video (5:41). A short case study which focuses on a fictional non-fatal incident.

Case Study #2 - show Video06-FallerInjured.mp4 video (6:03). A short case study which focuses on a fictional non-fatal incident.

Unit 19: Large Group Incident Demonstration / Practise Case Study Walkthrough

Background

SLIDE 80 – In this unit, you will lead the participants to work through an example full investigation of causes and associated corrective actions for a non-fatal incident.

Trainer's Notes

- As a large group you will work through the Pickup incident (found in the Trainer's Resource Section in the back of this manual and available as a handout) and demonstrate how to apply the incident investigation process with participants. If there isn't time in the day for two investigation practices, doing the one large group Practice Case Study is essential with a good debrief.

Tools to assist with the investigation / demonstration / practice:

- Use the following tools to support your participants in conducting the demonstration / practice investigation:

1. Use the Pickup Incident case study to work through with the large group for the demonstration / practice. Watch the video and read the incident description statement of the driver.
2. 5P handouts to help with providing additional information about causes that will help inform corrective actions from the investigation. Participants should ask for additional information (using 5 Ps approach for guidance) and if they ask the appropriate questions, the instructor can provide the additional information handout.
3. Sticky notes to write out the sequence of events, one event per sticky note. Ask participants to state each step in the sequence - write each step on a sticky note and post the sticky notes on the wall, or on a table, in the proper sequence. This will help them to identify if they have missed any events.
4. Copies of the blank Employer Incident Investigation Report form (Form 52E40).
5. The Case Study package includes:
    a) Incident description;
    b) Additional incident information relating to the 5 P's; and
    c) Possible Corrective Actions.

Activity

- Step 1 – Show the video and read the incident description (as the start of the "information gathering / interviewing" stage of the investigation.)
- Step 2 – Ask participants to record their observations and 'findings' as they work through the case study. Indicate that you have additional information that is available on request.

- Step 3 – After viewing the video or reading the incident description, lead a discussion using the 5 P's to gather information about what participants saw in the video or heard. Record comments under each P (Position, People, Process or Procedures, Parts, and Paper) on flipchart, whiteboard or chalkboard. Remind participants that you have additional information that is available, if they ask for it.
- Step 4 - Complete the sticky notes and post to show the sequence of events. Confirm that all events have been captured.
- Step 5 - Refer to the WorkSafeBC Employer Incident Investigation Form (52E40) and walk-through the relevant sections to be completed once all investigation information has been collected. Complete sections:
    - 4 – type of occurrence.
    - 5 – report type.
    - 6 – witnesses.
    - 7 – other persons.
    - 8 – sequence of events (per sticky notes).
    - 9 – unsafe conditions, acts, or procedures.
    - 10 – nature of the serious injury (= not applicable).
    - 11 – brief description of the incident.
    - 12 – preliminary corrective actions identified and taken (spend time on this section to develop preliminary corrective actions that relate to each of the unsafe conditions, acts, or procedures that contributed to the incident.
    - 13 – blank areas re: 10 – incident was a near miss / close call, no injury sustained.
    - 15 – determination of causes of incident.
    - 16 – full description of incident.
    - 17 – additional corrective actions necessary to prevent recurrence of similar incidents (spend time on this section to develop additional corrective actions that relate to each of the 5 P's).

Debrief

- Ask for feedback about challenges and comments about using the 5 P's to complete the incident investigation report.
- Top up with additional information or suggestions to support future investigations and incident investigations reports, with **emphasis on cause analysis and recommendations for corrective actions**.

Unit 20: Small Group / Team Incident Practise Case Study

Background

In this unit, you will walk through preliminary and full investigations for a second case study.

Instruction Points

SLIDE 81 – In small groups, participants will work through a preliminary and full investigation for the second case study incident to practise using the tools that they have learned in this course. This activity serves as the "exam" where participants in small groups work through the incident investigation process and complete an incident investigation report.

- For this incident investigation, arrange your participants into small groups (recommended group size of 3 or 4 to ensure participation). Be sure to leave sufficient time to debrief with the large group at the end.
- When organizing your participants into groups, divide the experienced people into different groups so that each group has some experienced people.

Resources to assist with the Team Practice Case Study investigation:

- Use the following training resources to support your participants as they work in small groups to conduct a practice investigation and complete the incident investigation report which documents causes, and recommends related corrective actions:

1. Select a case study of the 2 remaining – depending on time remaining in the day and level of complexity, either:

   Scenario 1 – **Wind Event Incident Case Study**

   or

   Scenario 2 – **ATV Unloading Incident Case Study**

2. 5P handouts to help with providing additional information about causes that will help inform corrective actions from the investigation. Participants should ask for additional information (using 5 Ps approach for guidance) and if they ask the appropriate questions, the instructor can provide the additional information handout.
3. Sticky notes to write out the sequence of events, one event per sticky note. Ask small groups to document each step in the sequence - write each step on a sticky note and post the sticky notes on their table, in the proper sequence. This will help them to identify if they have missed any events.
4. Copies of the blank Employer Incident Investigation Report form (Form 52E40).
5. Each scenario package (found in the Trainer's Resource Section at the back of this Trainer's Manual and **available as handouts**) includes:

a) Incident description;

b) Additional incident information relating to the 5 P's; and

c) Possible Corrective Actions.

Activity

- Step 1 – Once participants are in their small groups and before showing the video, have the groups discuss and decide what information they will try to gather from watching the video case study.
- Step 2 - Select the incident demonstration / practice case study to walk-through. Show the video of the "information gathering / interviewing" stage of the investigation.
- Step 3 - Show the video to the small groups as the "information gathering / interviewing" stage of the investigation. Direct groups follow the Incident Investigation Model to determine causes related to the incident. Indicate that you have additional information that is available on request.
- Step 4 – In small groups, have participants record observations and 'findings' as they watch the video.
- Step 5 – After viewing the video, the small groups discuss the 5 P's they gathered as they watched the video. The small groups should summarize comments under each P (Position, People, Process or Procedures, Parts, and Paper). Remind participants that you have additional information that is available on request.
- Step 6 – Small groups then complete the sticky notes and post on their table to show the proper sequence of events. Confirm that all events have been captured.
- Step 7 – Small groups then refer to the WorkSafeBC Employer Incident Investigation Form (52E40) and complete the relevant sections once all full investigation information has been collected. Complete sections:
    - 4 – type of occurrence.
    - 5 – report type.
    - 6 – witnesses.
    - 7 – other persons.
    - 8 – sequence of events (per sticky notes).
    - 9 – unsafe conditions, acts, or procedures.
    - 10 – nature of the serious injury (= not applicable).
    - 11 – brief description of the incident.
    - 12 – preliminary corrective actions identified and taken (the focus in this section is to develop preliminary corrective actions that relate to each of the 5 P's).
    - 13 – blank areas re: 10 – incident was a near miss / close call, no injury sustained.

- 15 – determination of causes of incident.
- 16 – full description of incident.
- 17 – additional corrective actions necessary to prevent recurrence of similar incidents (the focus in this section is to develop additional corrective actions that relate to each of the 5 P's).

- Step 8 - Monitor group work and coach / provide direction on working through the stages of the Incident Investigation Model:
  1. Gather information – the 5 P's
  2. Analyze the data
  3. Identify unsafe conditions, acts, or procedures that contributed to the incident
  4. Propose preliminary corrective actions
  5. Identify causes of the incident
  6. Propose additional corrective actions
  7. Create a follow-up action plan

Debrief

- When the groups have worked through the 5 stages, de-brief the case study – have each group report out on their experience working through the 7 stage model and what conclusions they came to.
- Ask for feedback about challenges and comments about using the 5 P's to complete the incident investigation report.
- Top up with additional information or suggestions to support future investigations and incident investigations reports, with **emphasis on cause analysis as the basis for recommendations for corrective actions**.

SECTION SEVEN – COURSE WRAP-UP

Unit 21: Wrap up of Incident Investigation Course

Background

SLIDE 82 – In this section, you want to summarize key learnings with your participants, as well as let them know what other resources are available to them.

Instructional Points

- Review the Course Objectives using a large group discussion format and the flipchart, ask your participants "What is the one most important thing that you are taking away from this course in terms of learning for each of the course objectives?".

- You could have your participants make a written commitment around what they are going to take on in their operations after this course. After giving them some time to develop their commitment, ask them to share it with the larger group.

PARTICIPANT MANUAL: Review page called “Actions to Support a Safety Culture.”

- Optionally, this could be a verbal discussion, where participants verbally share what they are taking away.

Hand out the course evaluation form and ask participants to complete it anonymously and hand back in.

SLIDE 83 – **End of course.**