

MAJOR PROGRAM POINTS

"ACCIDENT INVESTIGATION"

Part of the "GENERAL SAFETY SERIES"

Outline of Major Points Covered in the "Accident Investigation" Course

The following outline summarizes the major points of information presented in the course on "Accident Investigation". The outline can be used to survey the course before taking it on a computer, as well as to review the course when a computer is not available.

- **"Accidents will happen." We have all heard that before. And unfortunately, sometimes it's true.**
 - In spite of our best efforts to work safely, things occasionally do go wrong.
- **Many accidents may seem to happen for "obvious" reasons.**
 - It is easy to conclude that a worker was involved in an accident because they were working unsafely.
 - If an accident occurred at a work site that was known for hazardous conditions, we might assume the conditions were to blame.
- **Although these things can contribute to an accident, there may also be less obvious factors involved.**
 - To uncover the true cause of an accident, an "Accident Investigation" may need to be conducted.
- **An Accident Investigation has two main goals:**
 - To determine the cause of an accident.
 - To use this information to prevent similar accidents from happening in the future.
- **Remember that the goal of an Investigation is not to "assign blame" or "get anyone in trouble."**
 - It is to prevent anyone else, including you, from being injured.
- **There are several things that you can do to help prepare for an Investigation if an accident occurs.**
 - First, make sure any injured persons are being cared for.
 - Then secure the area ("safety tape" is often used for this).

- **Investigators need an undisturbed view of what took place.**
They may want to:
 - Take pictures.
 - Measure distances.
 - Gather other types of evidence at the scene.
- **Once the area is secured, the investigation can begin.**
 - Initially, interviews may be conducted to discover exactly what happened.
- **Determining the cause of an accident is not always easy.**
 - Most accidents are a result of several circumstances.
- **Often, investigators will use a technique called "Root Cause Analysis".**
 - This ensures that everything that contributed to the accident is identified.
 - It is an examination of the "chain of events" that led to the accident.
- **An accident is not just a single event.**
 - The groundwork can be laid days, weeks, even months in advance.
 - Faulty equipment, a poorly maintained machine, or an untrained worker can cause trouble down the road.
- **Root Cause Analysis looks for all the factors that could have contributed to the accident.**
 - It is a vital part of any Accident Investigation.
- **If you are interviewed, it is important to understand that the investigator needs your help.**
 - Be honest and provide as much information as you can.
 - You may be interviewed even if you did not witness the accident.
 - If you normally work in the area, or have previously performed the job, your experience might be valuable.

- **Remember, this information is gathered to help determine the exact cause of the accident, not to place blame on anyone.**
 - During an Investigation, offer as many details as you can.
 - Any information on the workers who were involved will help.
 - Information about the area where the accident occurred will also assist in the Investigation.

- **A Root Cause Analysis can lead to some very interesting conclusions. Let's look at an example.**
 - If someone slips on a restroom floor that was just mopped, we might conclude that the cause was a wet floor.
 - But the floor will always need to be mopped.
 - Never cleaning the restroom floor again is not a realistic solution.
 - We have to look deeper.

- **The wet floor is a major factor.**
 - But the accident might have been avoided if a warning sign had been posted.

- **Warning signs can be very effective in preventing accidents.**
 - As we continue to investigate the root cause of the accident, we need to determine why a warning sign was not posted.
 - It turns out that the facility did not have a policy requiring that warning signs be posted for hazards such as wet floors.

- **Let's summarize the scenario...**
 - We know a person fell on a wet floor.
 - There were no warning signs posted.
 - It was later determined that there was never a policy requiring warning signs.
 - If there had been a policy requiring warning signs when a floor was mopped, people would probably have avoided walking on the wet floor.
 - The accident might never have happened.
 - So the lack of a policy is the real culprit... not the wet floor.

- **Let's look at another example of Root Cause Analysis... when an electrician is suddenly shocked while working on a piece of equipment.**
 - It is too easy to conclude that electricity is the cause of the problem.
 - Although it is a major factor in the accident, electricity is necessary to operate the equipment.
 - So permanently removing electricity from the equation is not an option.

- **However, the equipment should have been temporarily "locked out" to prevent this kind of accident.**
 - So we have to ask ourselves why this step was not performed correctly.
 - We need to consider several things.

- **For instance, we should ask whether the facility had a "Lock-Out/Tag-Out" program in place?**
 - If there was a program, was training available?

- **We would also have to determine if the electrician was trained properly and if he was following the procedures he had learned.**

- **In this instance, the facility did have a Lock-Out/Tag-Out program, and training classes were held periodically.**
 - However, the electrician was new on the job.
 - He had not yet taken the course and didn't realize how important locking out the equipment was.

- **Slips and falls are accidents that sometimes don't get investigated fully.**
 - If a person falls we usually assume they lost their grip or their footing.
 - In fact, in most cases they probably did.
 - But we have to dig deeper.

- **Sometimes a worker wasn't wearing fall protection gear that would have prevented a serious injury.**
 - As we look for a root cause, we would then need to find out why the proper equipment was not used.

- **There are a number of reasons why an employee might skip proper safety procedures when doing a job... all of them bad.**
 - For instance, a "production push" could lead to an accident.
 - Sometimes in an attempt to get things done faster, workers who are in a hurry will "forget" about safety.
 - Ironically, if an accident does occur, production will often come to a screeching halt.

- **Sometimes miscommunication is the root cause of an accident.**
 - This may be the result of not hearing instructions completely... or not understanding them correctly.
 - In these situations, an investigator will also try to find out if a worker was told to ignore a procedure.

- **Again, it is important for everyone to remember that these facts are being used to get at the cause of the accident, not for any other reason.**

- **Once the root cause of an accident has been determined, steps must be taken to prevent similar accidents from occurring in the future.**
 - The ultimate goal of an Accident Investigation is to make sure the same type of incident does not happen again.

- **There are three basic areas to look at in an Investigation:**
 - Policies.
 - Equipment.
 - Training.

- **Sometimes new policies will need to be put in place to handle unsafe situations at a work site.**
 - Or existing policies may have to be updated.

- **If an accident involved faulty equipment, it may need to be repaired.**
 - If repairs are not possible, or it was not the proper equipment for the job, new purchases may be necessary.

- **Training is the third area that may need to be addressed.**
 - If the job or work site normally has potential hazards associated with it, everyone should be aware of the hazards... and be trained to handle them.
- **In most cases, the solution to the problem involves all three areas... policies, equipment and training.**
- **We can obviously learn a lot from accidents, but we can also learn quite a bit from a "Near Miss".**
 - A "Near Miss" is an incident which could have resulted in injury... or damage to equipment or materials.
 - In other words, "an accident waiting to happen."
- **Supervisors are not always aware of the day-to-day hazards that exist at work sites.**
 - You need to let them know.
 - That is one reason it is important to report Near Misses.
- **Near Misses can also warn us about a problem before an accident actually occurs.**
 - Lessons learned from Near Misses are far "less expensive".
- **Accidents can "cost" us a lot, in:**
 - Damaged equipment or materials.
 - Serious injuries.
 - Even death.
- **If you report a Near Miss, steps can be taken to solve the problem before it has a chance to become an accident.**
 - Prevention is always the best cure.
- **No matter how safely we do our jobs, accidents can happen.**
- **If an accident does occur, make sure that anyone who is injured is being cared for.**
- **Then secure the area so that nothing is disturbed.**
- **When interviewed about an accident, be completely candid and honest.**

- **Remember, Accident Investigations are not conducted to get anyone in trouble.**
- **An Accident Investigation has two purposes... to determine the cause of an accident... and to use this information to prevent it from happening again.**
- **A "Root Cause Analysis" is an examination of the "chain of events" that led to an accident.**
- **Policies, training and equipment can all play a role in preventing an accident from occurring. In most cases, the solution is a combination of all three.**
- **A "Near Miss" is an incident which could have resulted in an accident or injury. Reporting "Near Misses" can help prevent accidents.**
- **An Accident Investigation can create a safer, more productive workplace for everyone. So do what you can to help. The life you save could be your own!**