Accident Trending

One of the latest advancements in the accident investigation process is accident trending. Trending is the process of using a database to analyze accident trends and find out what areas, jobs, tasks, or programs are having the most accidents and why. For example, the discovery that one department is responsible for more medical calls than another may be an indicator that a major accident could occur in that department. If trending information such as this is used to make changes to reduce accidents, it is called proactive trending. Accident and medical logs are excellent sources for trending data. The more information received about an accident, the more trending opportunities there will be.

Many companies use trending to create colorful graphs and charts without actually focusing on problem areas and correcting the problems. It is important to remember that accident trending will not prevent accidents unless corrective actions are taken. If a trend is found—such as that electricians seem to be receiving three times as many shocks this year as last—the reasons (perhaps tool or procedure changes) must be determined and corrective actions taken.

Another problem with trending is that it may oversimplify accident analysis because, to keep things simple and make pretty charts, companies may choose to follow only a few root causes and base all of their trending on these causes. Unfortunately, this type of trending does not help to prevent problems. The root causes chosen by the companies—human error, procedures not followed, management failure, supervision not adequate—are too broad to have useful corrective actions. For example, if a company finds that 60 percent of the causes of its accidents are “management failure,” what will the corrective actions be? Give management more training? Training in what? The cause is too vague. If this happens, trending analysis will have lost its purpose.

Besides documenting information about types of accidents and which departments have the most accidents, trending and accident analysis can be used to show how many accidents occur on each day of the week or month; how many happen to each gender, age group, or department; how many happen at certain times of day or on certain shifts; how many happen to long-term versus short-term employees; how many happen to people doing a certain type of work or using a particular procedure; which causal factors are responsible for the most accidents; which corrective actions are most often
recommended; even what position employees were standing or sitting in when an accident occurred and what body parts are most often injured. Trending is an important tool for preventing accidents and correcting weaknesses in the safety program.

Follow-up Steps

- **Check that the corrective action has been completed correctly.** If a corrective action database is used, make a notation in the database when the corrective action has been completed.

- **Make certain the corrective action works to prevent accidents.** A new procedure must be tested to ensure that the problem was corrected and accidents will be prevented.

- **Ensure that the corrective action is being used.** If a new procedure was written, you will know that the corrective action was completed; however, the more important issue is that the new procedure is actually being used.

- **Be proactive.** A follow-up is an excellent opportunity to observe hazards in the field. When performing the follow-up, check to see if any other hazards could cause an accident. Any hazard that has the potential to cause injury, illness, or damage should be analyzed and corrected. Also keep in mind that a corrective action could have been completed correctly, but the changes it caused to the system may have created additional hazards that must now be corrected. For example, requiring maintenance workers to wear extensive personal protective equipment may lead to heat-related illnesses in warm weather. The follow-up is the last line of defense in the accident investigation process. This step should ensure a safe and healthy workplace free of hazards.

Summary

Documentation is an important part of the accident investigation process. The three types of documentation used are accident logs, accident forms, and accident reports. All types of accident investigation documentation should convey the facts of the investigation, the causal factors of the accident, and