## **Accident Analysis**

Experience has proven that the most effective way to reduce accidents is to concentrate on one phase of the incident at a time, rather than attempting to stop all accidents at once. Even in large operations when hundreds of accidents may occur annually, only rarely do two accidents occur in the same way. However, accidents do follow general patterns.

## **Analyzing and Grouping Workplace Accidents**

Grouping accidents according to common features will uncover relative patterns. Finding the patterns and common features of groups of accidents is the basis of accident analysis.

To analyze accident experience, it is essential that good reporting and accident investigation procedures are in place and function properly. The information supplied on the accident and investigation reports can be tabulated into a group or category. Once this is done, conclusions can be drawn from the data collected.

One method of collecting the data is to select an area of information from the accident reports and record the number of accidents that have occurred during any period of the selected time. Any area of information can be selected.

Examples of areas that can be used are:

- 1. Department where injury occurred
- 2. Occupation of the injured employee
- 3. Type of accident (fall, slip, struck by, strain)
- 4. Part of body injured
- 5. Equipment involved (press, saw, hand tools)
- 6. Task being performed at time of injury
- 7. Age of injured employee
- 8. Experience on the job
- 9. Nature and severity of injury
- 10. Unsafe act
- 11. Reason for unsafe act
- 12. Mechanical or physical hazard

Various areas of accident information can be selected. Additional information can include the name of the employee (which will be valuable to identify accident repeaters), day of week, etc.

The next logical step after tabulating the accidents according to area is to determine what specific features are common in the highest percentage of accidents. The conclusions reached will identify the principal area to concentrate on for preventing future accidents. Further study and evaluation of the key features may be necessary to find out why they are common factors in the accidents.

When the facts that directly lead to the cause of the accidents are uncovered, it should be clear to the analyst what needs to be done to prevent similar accidents. Finally, it is imperative to conduct effective accident investigations at the time of the loss or near-miss event, to ensure the information developed is as thorough and accurate as possible. This strengthens the validity of the identified trends.

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