

# Accident Analysis

Experience has proven that the most effective way to reduce accidents is to concentrate on one phase of the accident problem 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. Grouping them according to common features will uncover relative patterns in groups of accidents. 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 time selected. Any area of information can be selected.

Examples of areas that can be used are:

- **Type of Vehicle** – Private Passenger Car, Straight Truck, Tractor- Trailer, Pick-up
- **Type of Driving** – Intra-City, Inter-City, Long Haul, Pick-up & Delivery
- **Time of Accident** – Hour, Daylight, Dusk, Night
- **Accident Type** – Struck Other Vehicle, Ran Off Road, Backing
- **Accident Site** – Intersection, Roadway, Driveway
- **Road Conditions** – Dry, Wet, Icy, Foggy
- **Our Vehicle Action** – Passing, Backing, Parked
- **Driver's Experience** – With Company, With another Company, Total Various areas of accident information can be selected. Additional information can include the name of the driver (*which will be of value in identifying 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 accidents. Further study and evaluation of the key features may be necessary to find out why the features are common 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 becomes necessary to give thought to the selection and application of an effective accident remedy.