

## Chapter 3 - Forklift Accidents

Forklift accidents account for ten percent of the injuries induced in industrial accidents, even though the number of forklift accidents account for only one percent of industrial accidents. (Miller) This is evidence of the serious nature of forklift accidents. This is not surprising when the amount of energy involved in most forklift accidents is examined. Collision injuries are often serious due to high forklift speeds, as well as large momentum forces due to the heavy weights of many types of industrial lift trucks. Pinch point injuries occur when someone gets a part of his or her body pinned between the mast or forks of the lift and another object. These accidents often involve serious injuries like amputation as well as death due to the extremely high forces involved in such accidents. The forks and mast of an industrial lift truck are designed to move extremely heavy loads and are driven with high levels of power transmitted from the lift engine.

Common lift accidents will be examined in this chapter. The causes of these accidents will be analyzed to determine whether the type of accident is likely due to a design inadequacy, a manufacturing flaw, poorly maintained equipment, human error, environmental factors, control failure, or other causes. Contributing elements will also be investigated.

### **Forklift Accident Statistics**

The National Institute for Occupational Safety and Health (NIOSH) found that 100 fatalities occurred due to forklifts in 1997. This was up from 1995, when 94 people were killed in forklift-related accidents. The number of people seriously injured in forklift-related accidents was 20,000. The National Traumatic Occupational Fatalities (NTOF) Surveillance System records and analyzes fatality data. Between 1980 and 1994, 1,021 fatalities occurred due to forklift-related accidents. The fatalities were divided by accident type. The following chart shows the different types of accidents and the frequency of each.

<b>Type of accident</b>	<b>Frequency of accident, %</b>
Forklift overturn	22
Pedestrian hit by forklift	20
Person crushed by forklift	16
Person fell from forklift	9

This chart shows that forklift overturns are the leading cause of forklift-related fatalities. Pedestrian collisions are responsible for nearly as many deaths. The lifting mechanisms of forklifts left unguarded resulted in 163 deaths. Falls from forklifts also accounted for a significant number of fatalities. The majority of forklift accidents fall under these four accident types. These are definable problems, problems with solutions.