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LOGGING FATALITIES INVESTIGATED BY OSHA: 1996-1997

Surveys/Studies: safety

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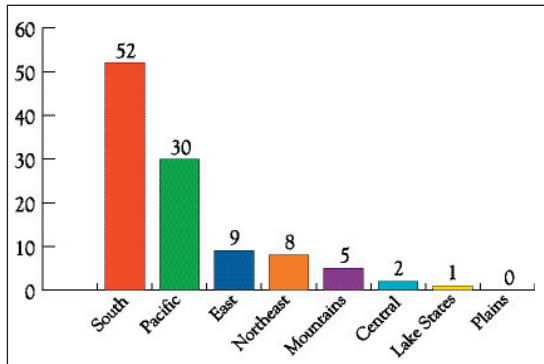


Fig. 1: Number of OSHA-investigated logging

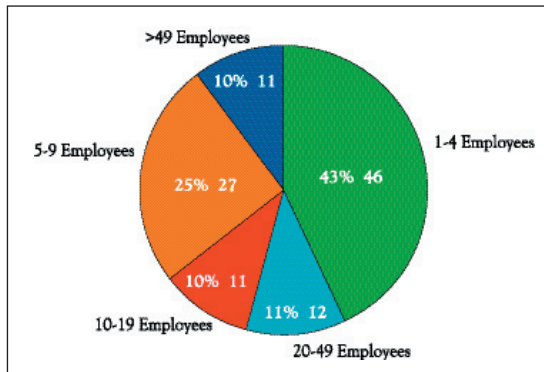


Fig. 2: Percent/number of logging establishments and OSHA-investigated fatalities by employment size

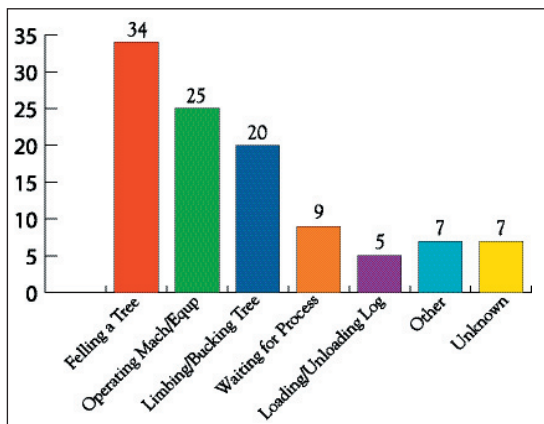


Fig. 3: Number of OSHA-investigated logging fatalities by employee activity (fiscal year 1996-1997)

INTRODUCTION: In 1996, logging was the second most dangerous occupation in the United States, judging from fatality rates published by the Bureau of Labor Statistics (BLS), and logging was *the* most dangerous occupation, surpassing commercial fishing, in 1997. During 1997, the Occupational Safety and Health Administration (OSHA) targeted logging for special attention to reduce the incidence of injuries in the industry.

GENERAL FEATURES: OSHA initiated an investigation into the causes of logging fatalities during the years 1996-1997. The stated purpose of this two-year review “is to provide OSHA and other users with updated information that may be useful in evaluating the nature and extent of more recent fatal occupational logging injuries,” better to focus enforcement, training, and assistance activities.

The 107 logging fatality investigations in this study represent 15% of the 696 logging deaths investigated by OSHA over the last 10 years. **Part 1** of the study focused on: (1) the number of OSHA-investigated fatalities, (2) the location of the fatalities by geographical region, (3) the time of day of the fatal incidents, (4) the age of the victims, (5) the number and classification of OSHA violations, (6) the assessed penalty amounts, and (7) the size of the establishments of the fatal incidents.

Part 2 of the study investigated (and summarizes its findings by): (1) the occupation of the victims fatally injured, (2) the work location of the fatally injured worker, (3) the type of accident(s) that caused the fatal injuries, (4) the employees’ activity at the time of the fatal injury, (5) the type of incident that resulted in the victims’ death, (6) factors that may have contributed to the accident, (7) the source of the fatal injury, (8) the action that resulted in the victims’ death, (9) the employees’ work pattern at the time of the incident,

and (10) the specific standards' violations cited by OSHA during its investigation of the fatal incidents.

KEY OBSERVATIONS: OSHA highlighted a number of items in **Part 1** during its investigation of the 107 fatalities:

- Almost half (49%) were in the Southern region. This region accounts for 45% of the logging businesses and 49% of the logging employees in the United States.
- Of the 107 logging fatalities investigated by OSHA, 80 resulted in citations. The average fine for those assessed a penalty was \$4,220.
- Forty-three percent of logging establishments employed 1-4 persons; twenty-five percent employed 5-9 persons.
- States with the highest rate of OSHA-investigated fatalities were: Utah, Illinois, Virginia, Vermont, West Virginia and New York. Two states (Maine and Wisconsin) had a significant number of logging establishments, 497 and 450 respectively, and only one fatality each.

Highlights contained in **Part 2** of OSHA's investigation of the 107 fatalities include:

- OSHA conducted 1,038 enforcement inspections of logging facilities during 1996-1997, representing a decrease of 52% in 1996 and 67% in 1997 when compared to 1990. OSHA asks, "Could an increase in enforcement inspections reduce the number of logging fatalities?"
- Felling trees caused 32% of the fatalities (34), 23% occurred during equipment operation (25), and 19% occurred during limbing/bucking (20), accounting for three-quarters of all fatalities.
- Of the 107 logging fatalities investigated by OSHA, 66% of woods workers were working alone at the time of death.
- Over ninety percent (92%) of logging fatalities resulted when the victim, other employees or the employer failed to follow designated safety procedures.
- Nearly half (49%) of the logging fatalities identified some aspect of training as a major causal factor of the accident.

AVAILABILITY OF REPORT: The *Review of Logging Fatalities Investigated by the Occupational Safety and Health Administration in FY 1996 and FY 1997* report is available from OSHA's web site at www.osha.gov/dit/ostat/reports/logging/index.html. This 472-page report is available as four downloadable .pdf files:

- Executive Summary only – 57 pages
- Part 1 only – 73 pages
- Part 2 plus Appendix – 342 pages
- Entire Report – 472 pages

COMMENT: Based on the analysis of 107 logging fatalities, OSHA recognized the need for increased levels of training of woods workers. In addition, OSHA noted the need for greater compliance with established on-the-job safety procedures and recommended that more OSHA enforcement inspections of logging operations be conducted. Maine and Wisconsin were identified by OSHA as states with extremely low logging fatality rates; both states also have excellent continuing education programs for loggers featuring "hands on" chain saw training for timber fellers.

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