AUTHORS:

- Cornelis F. de Hoop
- Associate Professor
- LA Forest Products Lab,
- School of Forestry, Wildlife, & Fisheries
- Louisiana Agricultural Experiment Station
- LSU Agricultural Center
AUTHORS, cont’d:

- John C. Pine
- Associate Professor - Research
- Institute for Environmental Studies
- Center for Coastal, Energy, and Environmental Resources
- Louisiana State University
- Research Interests: Emergency Management
AUTHORS, cont’d:

- Brian D. Marx
- Professor
- Department of Experimental Statistics
- College of Agriculture
- Louisiana State University
- Research Interests: Generalized Linear Models, ILL-Conditioned Data & Biased Estimation.
AUTHORS, cont’d:

- Albert J. Lefort
- Graduate Assistant
- Louisiana Forest Products Lab
- School of Forestry, Wildlife, & Fisheries
- Louisiana Agricultural Experiment Station
- LSU Agricultural Center
INJURIES TO LOGGERS IN LOUISIANA:
NATURE, TRENDS AND COSTS

Justification
Sources of Data
Nature and Sources of Injuries
Lost $$$ and Lost Time
Major Findings
Why Bother?

- Reduce Pain, Suffering, Lost wages
- WC Premiums 30-60% of Payroll
- High Hazard Industry
- OSHA
- High Accident Rate = Low Morale
Sources of Data

- Louisiana Dept. of Labor
  - Office of Workers’ Compensation
- Form 1007, Employer’s First Report of Injury
- Form 1003, Notice that Compensation Payments Have Been Stopped
- Form 1011, Request for Compromise or Lump Sum Payment
Accidents
&
Injuries

Louisiana Forest Products Lab
Number of Workers Employed in Logging in Louisiana

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>3500</td>
</tr>
<tr>
<td>1987</td>
<td>3000</td>
</tr>
<tr>
<td>1989</td>
<td>3000</td>
</tr>
<tr>
<td>1991</td>
<td>3000</td>
</tr>
<tr>
<td>1993</td>
<td>3000</td>
</tr>
<tr>
<td>1995</td>
<td>3000</td>
</tr>
<tr>
<td>1997</td>
<td>3000</td>
</tr>
</tbody>
</table>
Seniority of Logger

- 1 - 3 Months: 20%
- 1 - 3 Years: 26%
- 4 - 6 Months: 10%
- 7 - 11 Months: 10%
- 1 - 3 Years: 17%
- 4 - 5 Years: 6%
- 6 - 10 Years: 6%
- 11+ Years: 5%
Costs
Cost by Nature of Injury

- Other: $7,800 (Medical), $12,000 (Total)
- Strain/Spr: $8,000 (Medical), $12,200 (Total)
- Abrasion: $1,200 (Medical), $4,400 (Total)
- Fracture: $5,100 (Medical), $10,400 (Total)
- Laceration: $2,100 (Medical), $3,800 (Total)
- Crush: $900 (Medical), $7,300 (Total)
- Burns: $2,400 (Medical), $3,000 (Total)
- Amputation: $2,400 (Medical), $3,800 (Total)
Lost Workdays by Nature of Injury

<table>
<thead>
<tr>
<th>Injury Type</th>
<th>Avg. Lost Work Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>0</td>
</tr>
<tr>
<td>Multiple</td>
<td>102</td>
</tr>
<tr>
<td>Sprain/Strain</td>
<td>80</td>
</tr>
<tr>
<td>Fracture</td>
<td>161</td>
</tr>
<tr>
<td>Dislocation</td>
<td>196</td>
</tr>
<tr>
<td>Laceration</td>
<td>182</td>
</tr>
<tr>
<td>Contusion</td>
<td>102</td>
</tr>
<tr>
<td>Amputation</td>
<td>65</td>
</tr>
</tbody>
</table>
Cost by Body Part

- Head: $10,600
- Upper Ext: $3,200, $1,800
- Back: $14,700, $9,400
- Trunk: $9,200, $5,400
- Lower Ext: $4,000, $6,800
- Multiple: $12,900, $7,500

Medical
Comp
Lost Workdays by Body Part

- Head: 100
- Neck: 132
- Upper Ext: 141
- Back: 175
- Trunk: 232
- Lower Ext: 279
- Multiple: 71

Avg. Lost Work Days
Cost by Source of Injury

<table>
<thead>
<tr>
<th>Category</th>
<th>Medical</th>
<th>Comp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand Tools</td>
<td>$3,900</td>
<td>$2,500</td>
</tr>
<tr>
<td>Machines</td>
<td>$5,700</td>
<td>$3,500</td>
</tr>
<tr>
<td>Metal Items</td>
<td>$4,600</td>
<td>$2,300</td>
</tr>
<tr>
<td>Vehicles</td>
<td>$10,100</td>
<td>$6,000</td>
</tr>
<tr>
<td>Wood Items</td>
<td>$8,300</td>
<td>$5,600</td>
</tr>
<tr>
<td>Wk Surface</td>
<td>$13,700</td>
<td>$9,100</td>
</tr>
<tr>
<td>Other</td>
<td>$10,500</td>
<td>$5,700</td>
</tr>
</tbody>
</table>
Lost Workdays by Source of Injury

- Body Motion: 240
- Hand Tool: 73
- Machines: 84
- Metal Items: 77
- Plants, Tree: 162
- Vehicles: 192
- Wood Item: 177
- Wk Surface: 200
- Other: 100

0 50 100 150 200 250
Cost by Type of Accident

<table>
<thead>
<tr>
<th>Type</th>
<th>Medical</th>
<th>Comp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Struck</td>
<td>$7,700</td>
<td>$4,200</td>
</tr>
<tr>
<td>Temp</td>
<td>$2,900</td>
<td>$800</td>
</tr>
<tr>
<td>Caught</td>
<td>$3,400</td>
<td>$2,800</td>
</tr>
<tr>
<td>Overexert</td>
<td>$10,000</td>
<td>$7,000</td>
</tr>
<tr>
<td>Falls</td>
<td>$13,400</td>
<td>$8,700</td>
</tr>
<tr>
<td>Vehicles</td>
<td>$9,700</td>
<td>$6,200</td>
</tr>
<tr>
<td>Rubber</td>
<td>$500</td>
<td>$2,600</td>
</tr>
<tr>
<td>Other</td>
<td>$15,200</td>
<td>$10,200</td>
</tr>
</tbody>
</table>
Conclusions

- Newest workers have the most injuries.
  - New worker training is very important.
- Fractures & Strains/Sprains = most common
- Fractures & Strains/Sprains = most expensive & longest recovery time.
- Mount/Dismount Equipment
Conclusions (cont’d)

- Truck drivers get hurt a lot, too.
Conclusions (cont’d)

- The rate of serious accidents is decreasing, but the injuries are getting more serious.