Chainsaw Training for

By

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Chainsaw Safety

- Introduction – Why me?
- Accidents
- Attitude
- Personal Protective Equipment (PPE)
- Safety features on the modern chainsaw
- PPE vs Medical
- Solutions
- Questions
Chainsaw Accidents

Logging

On October 9, 1992, a 33-year-old male tree feller was killed while operating a chainsaw. Using a 4-horsepower, 16-inch, bow-bar chainsaw, the victim felled a 40-foot pine tree. He then used the bow-bar chainsaw to cut the limbs from the felled tree. As the victim cut through a spring pole, the chain saw recoiled and kicked back, fatally striking him in the throat.

Arborist

Priceonomics Lumberjack: America’s Deadliest Profession, June 12, 2015
Chainsaw Accidents

Christmas Tree Growers
Common Denominator Between Logging, Arborist, and Christmas Tree Growers?
The Chainsaw
Chainsaw Injuries

Chain Saw Injury Statistics

<table>
<thead>
<tr>
<th>Body Area</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Area</td>
<td>2,342</td>
</tr>
<tr>
<td>Upper Body</td>
<td>1,121</td>
</tr>
<tr>
<td>Arms &amp; Hand Area</td>
<td>12,035</td>
</tr>
<tr>
<td>Leg Injuries</td>
<td>12,851</td>
</tr>
<tr>
<td>Foot Area</td>
<td>2,579</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>30,928</strong></td>
</tr>
</tbody>
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Chainsaw Injuries

115,895 ER visits in US involving chainsaw (09-13)
95% Male
30-50 avg. age
Lacerations #1 injury at 80%
-Average annual amputations – 139
-Head & Neck diagnosed as lacerations, roughly 983/yr.
Chainsaw Injuries

Common theme

Protective gear (PPE) not wore
Saw operator was not competent
Cited lack of appreciation for saw risks
Disregard for safety procedures

Advances in Emergency Medicine, Epidemiology of Chain Saw Related Injuries, United States: 2009 through 2013
Hammig and Jones, September 6, 2015
Chainsaw Injuries
WHY?

• Lack of Personal Protective Equipment (PPE)
• Improper starting technique
WHY?

• Complacency rather than Ignorance
• Working with in the blood bubble

The danger zone where the nose of the sawyer’s bar can reach in any direction.
Look Familiar?
Personal Protective Equipment (PPE)

- Chaps
  - Cost ~ $150.00/pair

- Gloves
  - Cost - $9 – 40/pair

- Safety Glasses
  - 22 pairs listed with anti fog Cost $4 – 30
  - FogShield - $8
  - Dawn dish soap - $4
Personal Protective Equipment (PPE)

• Hearing Protection - NRR - 29dB – 33dB
  – Cost $20 – 50/bag containing 200-500 pairs

• Aggressive tread boots
Safety Features

• Chain brake/Front handle
• Chain catch peg
• Wide rear handle
• Throttle lock
• Anti-vibration system
• Centrifugal clutch
Safety Features

- Chain Brake & Front Handle
- Throttle lock
- Wide Rear Handle
- Chain Catch Peg
Chain Catch Peg

**STIHL**

**HUSKY**
Chain Catch Peg
Rear Handle

Wide rear handle

Rear handle in middle of saw
Anti-vibration System
PPE and Modern Saw

• Total cost to outfit 3 employees with PPE and modern saw with safety features $\approx$ $2600
  (PPE for 3 employees $500, 3$ saws @ $700)

• Additional PPE for non-saw operators, roughly $25/person.
  – Gloves, hearing, eye
Medical Costs

• Chainsaw injuries treated at ER
  – Average 110 stitches
  – Minimum $10,000
  – Insurance premium increases?
  – Quality of life maintained?

• What if... death, dismemberment?
Look Familiar?
Chainsaw Injuries
Solutions

• Wear all PPE; saw operators.
• Tree pullers – cut resistance gloves, eye and ear protection.
• Stop drop starting! There are safer techniques.
  – At least engage the chain brake before cold starting.
  – Start away from coworkers and fuel.
• Training. Job duties, sawyers and pullers.
Solutions

• Properly sharpened chain.
• Well maintained powerhead.
• Saw safety features present, operational, and used.
• No modifications to saw unless manufacturer approved.
• Training. In-house, review of safety and saw handling skills, annually, before cutting begins!
Chainsaw Safety

Think Safety All The Time

Even if you were born to do a job, it doesn’t necessarily
mean that you’re going to automatically do it
safely....Remember that no matter how many times
you’ve done a job before, be sure to think the whole
thing through before you start. You’ve carefully
thought out all the angles. You’ve done it a thousand
times. It comes naturally to you. You know what you’re
doing, it’s what you’ve been trained to do your whole
life. Nothing could possibly go wrong, right? ? ?  Think
again...
QUESTIONS
Thank you!
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