

# Top Safety and Health Hazards in General Industry

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# OSHA Data

- Data reflects January 1, 2018 to December 31, 2018
- General Industry includes manufacturing, service, retail, warehousing, utilities, wholesale trade, transportation, industries
- Data specific to manufacturing sector mirrored all of general industry

# Texas Top 10 General Industry

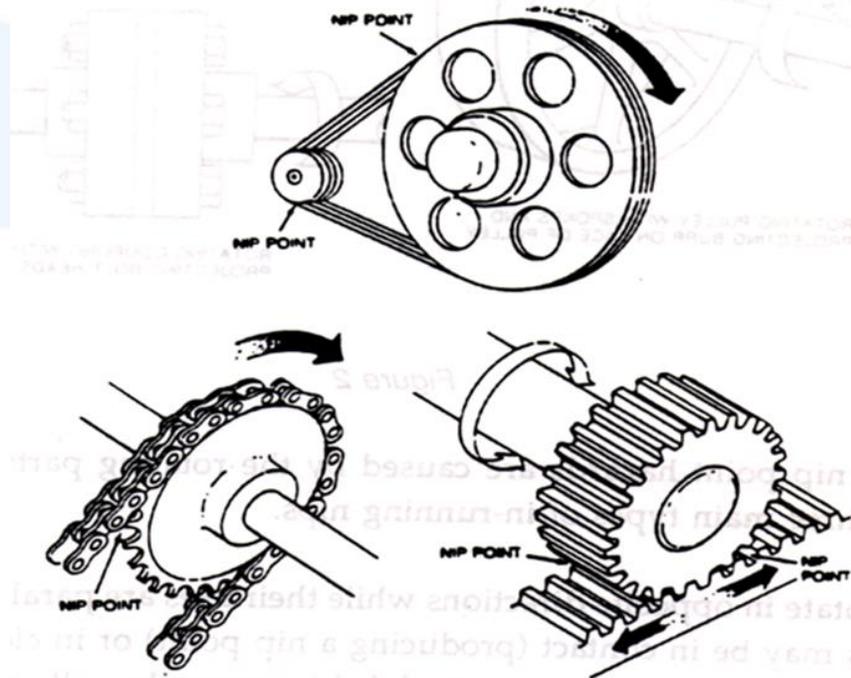
• Regulation	Fine	#Cited
• 1. 1910.212(a)(1)	\$1.3 M	116
• 2. 1904.39(a)(2)	\$458K	90
• 3. Section 5(a)(1)	\$1.1M	89
• 4. 1910.1200(e)(1)	\$304 K	72
• 5. 1910.1200(h)(1)	\$144K	57

# Texas Top 10 General Industry

• Regulation	Fine	#Cited
• 6. 1910.212(a)(3)(ii)	\$591 K	55
• 7. 1910.147(c)(4)(i)	\$542K	51
• 8. 1910.305(g)(2)(iii)	\$142K	48
• 9. 1910.134(e)(1)	\$160K	45
• 10. 1910.28(b)(1)(i)	\$326K	47

# Top 10 General Industry

- 1. 1910.212(a)(1): General machine guarding requirement.
- If it moves, guard it!



# Top 10 in Manufacturing

- 1. 1910.212(a)(1): Machine Guarding
- “If it moves, guard it”



Gotcha Stick

# Top 10 General Industry

- 2. 1904.39(a)(2): Reporting a amputation, loss of eye or in-patient hospitalization of a worker within 24 hours
- How to report:
- Call 1-800-321-OSHA
- Call closest OSHA Area Office
- Go to <https://www.osha.gov/report> to report on-line
- OSHA inspects about 40% of these reports, rest are handled by a dialogue with the employer



# How Does OSHA Define Amputation?

- An amputation is the traumatic loss of a limb or other external body part. Amputations include a part, such as a limb or appendage, that has been severed, cut off, amputated (either completely or partially); fingertip amputations with or without bone loss; medical amputations resulting from irreparable damage; amputations of body parts that have since been reattached. Amputations do not include avulsions, enucleations, degloving, scalpings, severed ears, or broken or chipped teeth.



# Reporting Guidelines

- To be reportable to OSHA, the amputation, loss of eye, or in-patient hospitalization must occur within 24 hours of learning of the workplace incident.
- If the amputation, loss of eye, or hospitalization occurs while driving on a public road---not reportable to OSHA unless it occurred in a construction work zone.
- Not required to report cases that occurred on an airplane, train, subway, or bus



# Top 10 General Industry

- 3. Section 5(a)(1)
- Example: Not following manufacturer's recommendations for equipment, which resulted in a serious injury or death
- Applies to serious hazards for which OSHA does not have a specific law
- Frequently cited in oil & gas inspections

# Top 10 General Industry

- 4. 1910.1200(e)(1):
- Written hazard communication program
- OSHA inspectors will ask to see your written hazard communication program on every inspection
- The written program is your policy statement on who is responsible for obtaining safety data sheets, training and labeling in-house containers.

# Top 10 General Industry

- 5. 1910.1200(h)(1):
- Worker training on chemicals
- Workers need to be trained on the changed labels and safety data sheets
- Workers need to be trained when new chemicals are introduced to the workplace

## HCS Pictograms and Hazards

<b>Health Hazard</b>  <ul style="list-style-type: none"><li>• Carcinogen</li><li>• Mutagenicity</li><li>• Reproductive Toxicity</li><li>• Respiratory Sensitizer</li><li>• Target Organ Toxicity</li><li>• Aspiration Toxicity</li></ul>	<b>Flame</b>  <ul style="list-style-type: none"><li>• Flammables</li><li>• Pyrophorics</li><li>• Self-Heating</li><li>• Emits Flammable Gas</li><li>• Self Reactives</li><li>• Organic Peroxides</li></ul>	<b>Exclamation Mark</b>  <ul style="list-style-type: none"><li>• Irritant (skin and eye)</li><li>• Skin Sensitizer</li><li>• Acute Toxicity (harmful)</li><li>• Narcotic Effects</li><li>• Respiratory Tract Irritant</li><li>• Hazardous to Ozone Layer (Non-Mandatory)</li></ul>
<b>Gas Cylinder</b>  <ul style="list-style-type: none"><li>• Gases under pressure</li></ul>	<b>Corrosion</b>  <ul style="list-style-type: none"><li>• Skin Corrosion/ Burns</li><li>• Eye Damage</li><li>• Corrosive to Metals</li></ul>	<b>Exploding Bomb</b>  <ul style="list-style-type: none"><li>• Explosives</li><li>• Self-Reactives</li><li>• Organic Peroxides</li></ul>
<b>Flame Over Circle</b>  <ul style="list-style-type: none"><li>• Oxidizers</li></ul>	<b>Environment (Non-Mandatory)</b>  <ul style="list-style-type: none"><li>• Aquatic Toxicity</li></ul>	<b>Skull and Crossbones</b>  <ul style="list-style-type: none"><li>• Acute Toxicity (fatal or toxic)</li></ul>

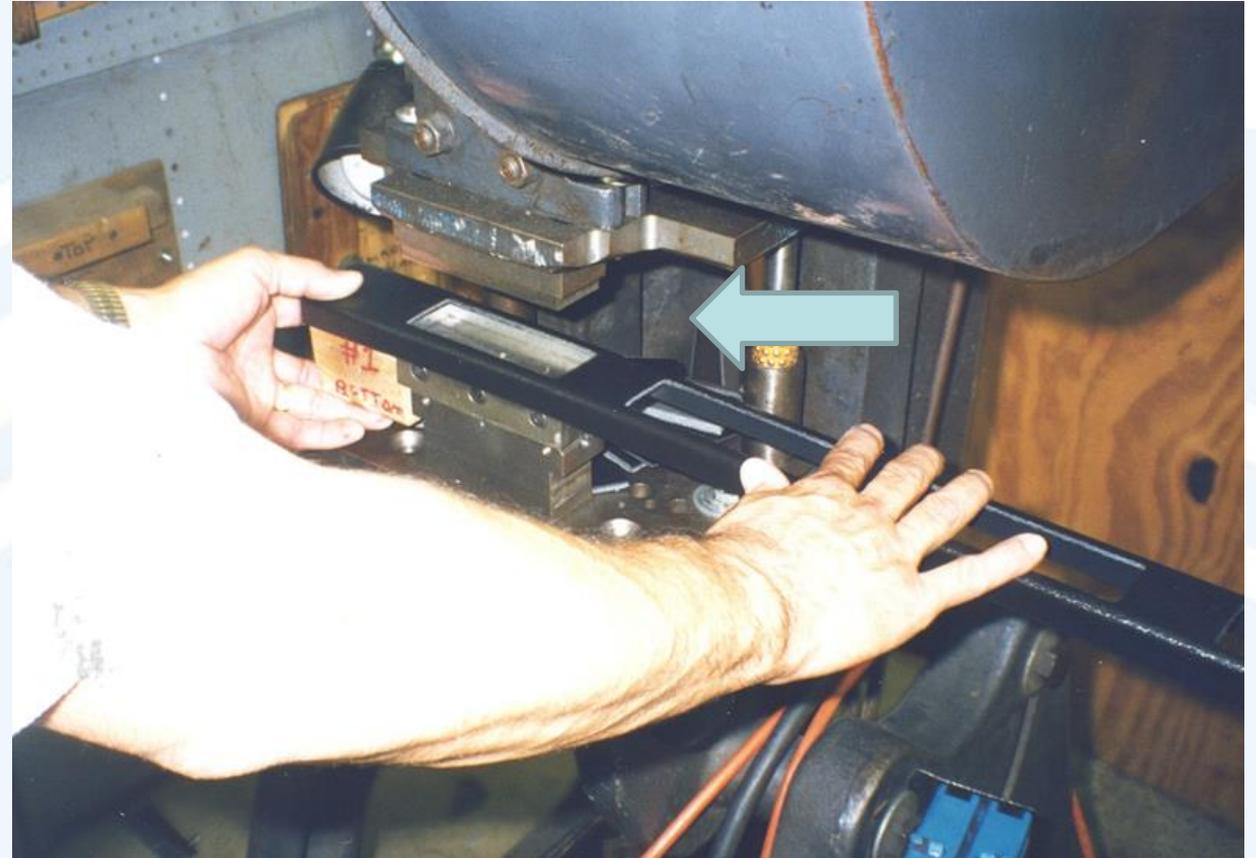
# Top 10 General Industry

- Workers should know the location of the safety data sheet book, and understand what information is on the safety data sheet
- OSHA Compliance officers frequently will note chemicals used by workers and then check the SDS book to make sure you have the sheet
- OSHA Compliance Officers will check that in-house containers have labels



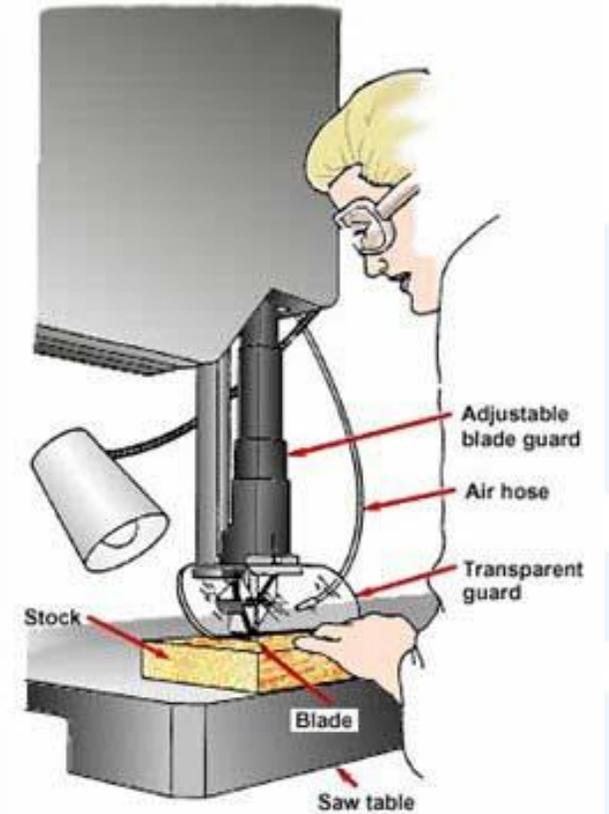
# Top 10 General Industry

- 6. 1910.212(a)(3)(ii):
- Guarding the point of operation on machines



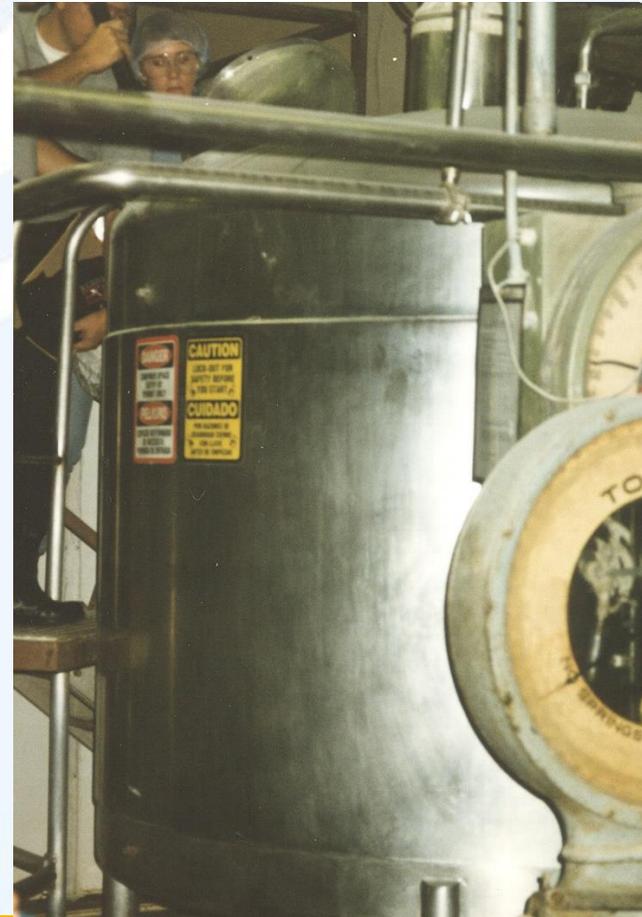
# Top 10 General Industry

- The point of operation is where the work actually takes place;
- Examples: the saw blade on the band saw
- The ram on the punch press



# Top 10 General Industry

- 7. 1910.147(c)(4)(i):
- No written lock out/tag out procedures when there is more than one energy source



# Top 10 General Industry

- OSHA's Lock Out Tag Out regulation requires:
- A written program, locks singularly identifiable
- Specific procedures where there is more than one energy source
- One lock applied for each worker participating in lock out
- Documented worker training for authorized employees
- Documented observations of authorized employees doing lock out tag out annually
- Training of affected workers on the meaning of locks/tags



# Top 10 General Industry

- 8. 1910.305(g)(2)(iii):
- The cord should not be pulling away from the cord



Don't use extension cords in lieu of fixed wiring

# Do's & Don'ts for Extension Cords

- Don't run through walls, windows, holes, ceilings, where they can be crimped
- Don't conceal behind walls or attach to building surfaces
- Don't repair extension cords
- Extension cords must be 3 prong (grounded)
- Extension cords must be type S, G or W (hard service)
- Allowed uses of flexible cords is listed in 1910.305(g)(1)(ii)

# 1910.304(b)(3)

- Requires maintenance personnel be protected by a ground fault current interrupter (GFCI)
- Using a GFCI in series with the equipment meets this requirement

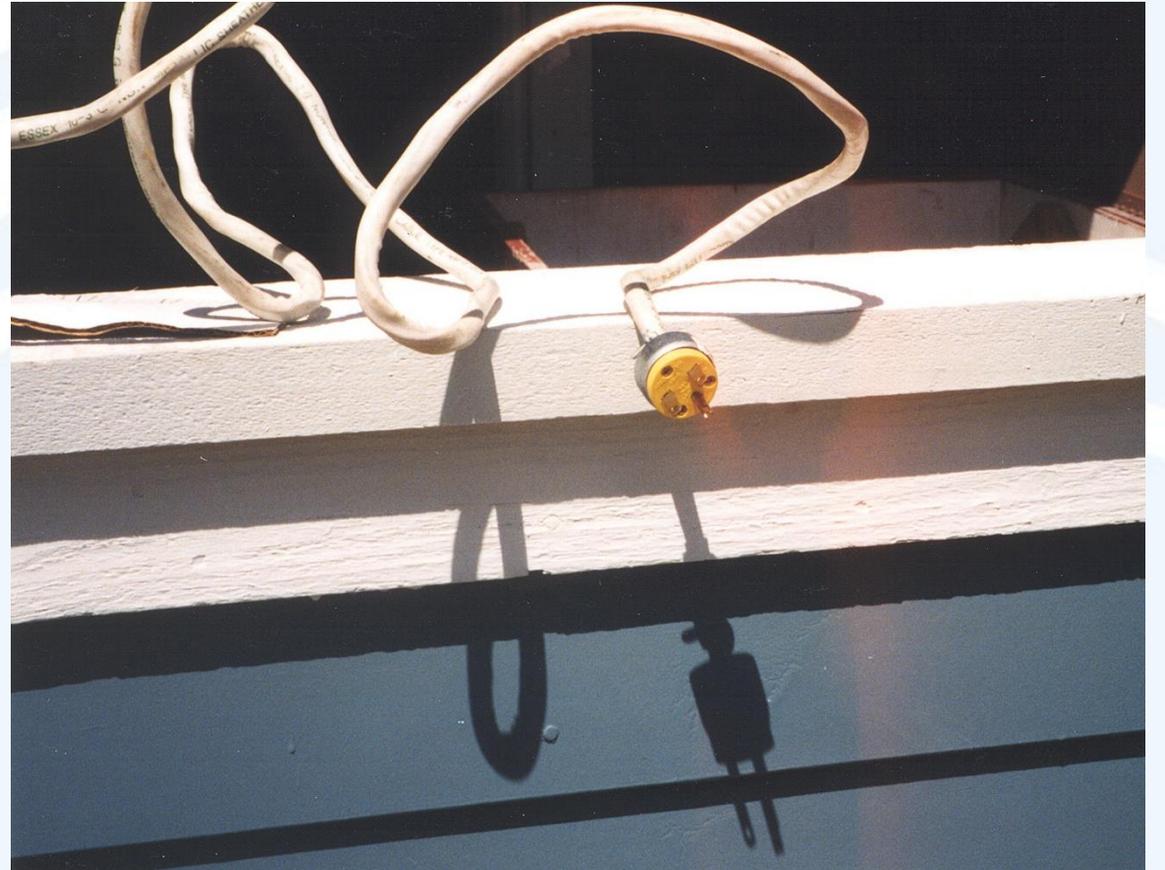


# Approved Equipment

- All electrical must be listed, labeled, and approved by a testing lab (such as Underwriter's Laboratory.)



<https://verify.ul.com/>



# Top 10 General Industry

- 9. 1910.134(e)(1): Workers that are required to wear a respirator need a medical evaluation
- Minimum evaluation is filling out the questionnaire in 1910.134 and having it reviewed by a medical professional



# OSHA's Respiratory Protection Law Requires:

- Ventilation controls are preferred over respirators
- Respirators be provided based on the hazards (you need to know worker exposure levels to select respirators.)
- A written program governs the use of respirators
- A Program Administrator is required
- Mandatory vs. Voluntary use
- Respirators must be fit tested to the individual
- Worker training on proper use, limitations and maintenance

# Top 10 General Industry

- 10. 1910.28(b)(1)(ii): Workers must be protected against a fall of 4 feet or more.



# Common Scenarios Where Fall Protection is a Consideration

- Loading docks
- Maintenance workers who go up on the roof to troubleshoot systems
- Mezzanines



# Questions?

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